





Photo credit: Sub.Coop





## MODERN SLAVERY: A HIDDEN, EVERYDAY PROBLEM.



In 2016, 40.3 million people were living in modern slavery. It exists in every corner of the world, yet is seemingly invisible to most people. Unravelling this problem requires sustained vigilance and action. Take this fire in a clandestine textile workshop in Buenos Aires, Argentina. These images are from 2006, yet the fight for justice for the five boys and a pregnant woman who were forced to work at this facility, and died in this fire, is still ongoing. In 2016, a court sentenced the workshop operator to 13 years prison for servitude and destruction of property causing death. This year, the court called for a deposition from the owner of the clothing brands, who also owns the property.

The fight to end modern slavery continues. We can, and must, do more.





## Unravelling the numbers

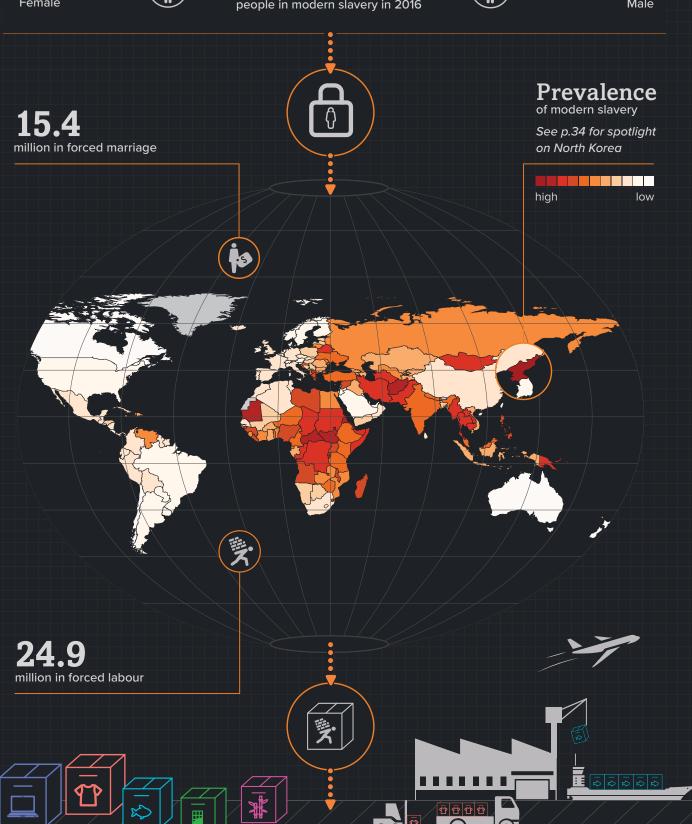
**71%** 



**40.3** million people in modern slavery in 2016



29% Male



## How governments respond

## Most action



Government responses to modern slavery



Least action

Netherlands **United States United Kingdom** Sweden

Belgium

Croatia Spain

Norway

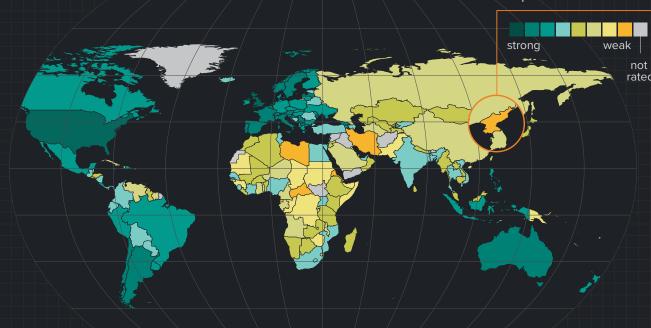
Portugal

Montenegro



North Korea Libya Eritrea Central African Republic **Equatorial Guinea** Burundi Republic of the Congo Sudan Mauritania

See p.192 for full data table



Georgia Moldova

Senegal

Sierra Leone

Mozambique

Qatar Singapore Kuwait Brunei Hong Kong, China

## **Strong response**

relative to GDP (PPP)\*

Weak response

relative to GDP (PPP)\*

## G20 leaders in consumption

Export risk



54 billion at-risk products imported by G20 countries\*



Import risk



At-risk

products of modern slavery See p.103 for product key



products at risk of modern slavery imported into the G20 (by US \$ value)

Fish

3/ \$12.9 billion



1/

Laptops, computers & mobile phones

\$200.1 billion



Cocoa

\$3.6 billion



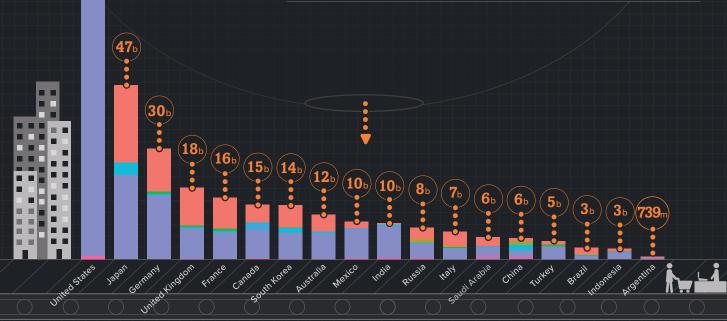
Garments

\$127.7 billion



Sugarcane

\$2.1 billion



## Governments, businesses, & consumers...

12 countries not taking action



#### **G20** countries

need to take action to stop sourcing goods & services at risk of being produced by forced labour



7 countries

taking action

Argentina Australia\* Canada India Indonesia

Indonesia Japan Mexico Russia

South Africa Saudi Arabia South Korea Turkey Ž.

Brazil China France Germany Italy United Kingdom United States

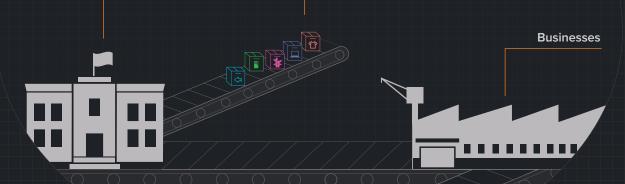
\*Australia has announced it will introduce supply chain transparency laws in the second half of 2018

## Slavery in supply chains

Government response on Imports, Public Procurement, Business Supply Chains, Identifying Risk is critical

See p.107 for details on actions being taken.

Governments



Consumers



...must do more



## FOREWORD by Andrew Forrest

Too often, the onus of eliminating modern slavery is placed only on the countries where the crime is perpetrated. They certainly have a responsibility, but they are not alone in this regard.

An atrocity as large and pervasive as modern slavery requires a united, global response.

Last year, the Global Estimates of Modern Slavery, developed with the International Labour Organization and International Organization for Migration, showed that more than 40 million people globally are living in modern slavery and over a period of five years, 89 million people experienced some form of slavery — whether for a few days or several years. These numbers represent people held in debt bondage on fishing boats, against their will as domestic servants, trapped in marriages they never agreed to, and numerous other abuses.

Though almost every country has declared it illegal, modern slavery still exists on a shocking and unacceptable scale in these and many other forms. And yet, action from the countries most equipped to respond is underwhelming.

By declaring modern slavery as a problem that happens "over there", high-GDP countries are ignoring their culpability for this human rights crisis.

The Walk Free Foundation's 2018 Global Slavery Index makes this clearer than ever before.

As well as measuring where modern slavery occurs and how governments are responding, for the first time the Global Slavery Index also provides a picture of the factors that allow modern slavery to prosper, and where the products of the crime are sold and consumed.

This complete picture draws high-GDP countries into sharp focus.

We have a better grasp on prevalence in high-GDP countries – it is greater than we previously understood.

We better understand the factors which contribute to modern slavery – migration, conflict, repressive regimes, unethical business, environmental destruction and discrimination. While responsibility for some of these factors belongs with the countries where modern slavery is occurring, some of these factors are directly linked to policy decisions of high GDP countries.

And, the 2018 Global Slavery Index finds businesses and governments in G20 countries are importing products that are at risk of modern slavery on a significant scale.

Our analysis identified the "top five" products at risk of modern slavery in each of the G20 countries – it includes common items such as laptops, computers and mobile phones, apparel and accessories, fish, cocoa and timber.

G20 countries are collectively importing US\$354 billion worth of these at-risk products annually.

Disappointingly, only seven G20 countries have formally enacted laws, policies, or practices to stop business and government sourcing goods and services produced by forced labour.

As well as providing countries with the tools to address slavery within their borders, it is important all countries consider the issue from a global perspective, and collaborate on solutions.

To end modern slavery, high-GDP countries must examine how their policy decisions contribute to the conditions which allow modern slavery to prosper abroad, and the extent to which the profits of modern slavery permeate their borders.

Our recommendations call on all governments to prioritise human rights when engaging with repressive regimes, predict and respond to slavery in conflict situations, address modern slavery at home, examine public and private supply chains, and advocate for the rights of women and girls globally.

Businesses must join this fight by collaborating with government, addressing the risk of modern slavery in their supply chains and providing transparency to investors and consumers.

"Over there" doesn't exist in this fight – we must all work as one to end slavery for good.



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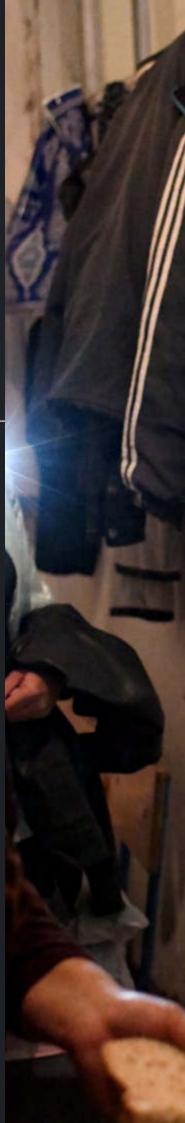
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#### Uzbekistan, October 2017.

Workers stay at a former school in a village in Tashkent region, hours from their hometown. The building is dilapidated, cold and ruined. They sleep on the floor and eat breakfast in the former gym having been forcibly mobilized to pick cotton. Forced labour has been a regular feature of cotton harvests in post-Soviet Uzbekistan. However, in mid-September 2017, the Uzbek President referred to ending forced labour in a speech to the United Nations and the government recalled school children and state workers from the fields. While this is great progress, implementation needs to be supported and carefully monitored. NGO monitors revealed that even as workers are being brought back from the fields, some local officials are extorting funds from businesses and individuals to pay for "replacement" workers. Activists trying to monitor the situation also report being threatened and harassed.

Photo credit:Yuri Kozyrev / NOOR





## **EXECUTIVE SUMMARY**

Depriving someone of their freedom is a terrible violation. Modern slavery is a destructive, personal crime and an abuse of human rights. It is a widespread and profitable criminal industry but despite this it is largely invisible, in part because it disproportionately affects the most marginalised. This is why measuring this problem is so crucial in exposing and ultimately resolving it. The information contained within the Global Slavery Index is critical in these efforts.

The 2018 Global Slavery Index measures the extent of modern slavery country by country, and the steps governments are taking to respond to this issue, to objectively measure progress toward ending modern slavery. The Index draws together findings from across estimates of prevalence, measurement of vulnerability, and assessment of government responses, alongside an analysis of trade flows and data on specific products. When considered as a set, the data provide a complex and insightful picture of the ways modern slavery is impacting countries around the world. This enables us to refine our thinking on how to better respond to modern slavery, and also how to predict and prevent modern slavery in future.

As reported in the recent Global Estimates of Modern Slavery, published by the International Labour

Organization and the Walk Free Foundation, in partnership with the International Organization for Migration, an estimated 40.3 million people were living in modern slavery in 2016. In other words, on any given day in 2016, there were more than 40 million people – about 70 percent of whom are women and girls – who were being forced to work against their will under threat or who were living in a forced marriage. In the past five years, 89 million people experienced some form of modern slavery for periods of time ranging

from a few days to the whole five years. These estimates are conservative, given the gaps in existing data in key regions such as the Arab States and also exclusions of critical forms of modern slavery such as recruitment of children by armed groups and organ trafficking due to lack of data. From this starting point, the 2018 Global Slavery Index uses predictive modelling, based on data from nationally representative surveys and the Walk Free Foundation Vulnerability Model, to estimate the prevalence of modern slavery country by country.

## The contributing factors

Findings from the 2018 Global Slavery Index highlight the connection between modern slavery and two major external

drivers - highly repressive regimes, in which populations are put to work to prop up the government, and conflict situations which result in the breakdown of rule of law, social structures, and existing systems of protection.

The country with the highest estimated prevalence is North Korea. In North Korea, one in 10 people are in modern slavery with the clear majority forced to work by the state. As a UN Commission of Inquiry has observed, violations of human rights in North Korea are not mere excesses of the state, they are an essential component of the political system. This is reflected in the research

on North Korea undertaken through interviews with defectors for this Global Slavery Index. North Korea is followed closely

The findings highlight the connection between modern slavery and two major external drivers - highly repressive regimes, in which people are put to work to prop up the government, and conflict situations which result in the breakdown of rule of law, social structures, and systems of protection.



Nicoleta, 34, Romanian survivor of forced labour and forced sexual exploitation in Sicily

"I came to Sicily with my husband. We needed to send money back to support our children in Romania. But the greenhouse farmer where we found work said I had to sleep with him, and if I refused, he wouldn't pay us. My husband said it was the only way we could keep our work. My employer threatened me with a gun, and when he finished, he just walked away. This went on for months. I left both the farm and my husband, but found out it is the same wherever you try to find work here in Sicily."

Photo credit: Francesca Commissari for The Guardian

by Eritrea, a repressive regime that abuses its conscription system to hold its citizens in forced labour for decades. These countries have some of the weakest responses to modern slavery and the highest risk.

The 10 countries with highest prevalence of modern slavery globally, along with North Korea and Eritrea, are Burundi, the Central African Republic, Afghanistan, Mauritania, South Sudan, Pakistan, Cambodia, and Iran. Most of these countries are marked by conflict, with breakdowns in rule of law, displacement and a lack of physical security (Eritrea, Burundi, the Central African Republic, Afghanistan, South Sudan and Pakistan). Three of the 10 countries with the highest prevalence stand out as having state-imposed forced labour (North Korea, Eritrea and Burundi). Indeed, North Korea, Eritrea, Burundi, the Central African Republic, Afghanistan, South Sudan and Iran are the subject of various UN Security Council resolutions reflecting the severity and extremity of the situations there.

## A global issue

One of the most important findings of the 2018 Global Slavery Index is that the prevalence of modern slavery in high-GDP countries is higher than previously understood, underscoring the responsibilities of these countries. Through collaboration, the number of data sources which inform the Index has increased. This has allowed the Index to more consistently measure prevalence in countries where exploitation has taken place. More surveys in sending countries has resulted in more data about receiving countries, most of which are

highly developed. Following these changes, an interesting pattern emerges: the prevalence estimates for the United States, Australia, the United Kingdom, France, Germany, the Netherlands, and several other European nations are higher than previously understood. Given these are also the countries taking the most action to respond to modern slavery, this does not mean these initiatives are in vain. It does, however, underscore that even in countries with seemingly strong laws and systems, there are critical gaps in protections for groups such as irregular migrants, the homeless, workers in the shadow or gig economy, and certain minorities. These gaps, which are being actively exploited by criminals, need urgent attention from governments.

The realities of global trade and commerce make it inevitable the products and proceeds of modern slavery will cross borders. Accordingly, for the first time we examine the issue of modern slavery not only from the perspective of where the crime is perpetrated but also where the products of the crime are sold and consumed, with a specific focus on the G20 countries. The resulting analysis presents a stark contrast of risk and responsibility, with G20 countries importing risk on a scale not matched by their responses.

Citizens of most G20 countries enjoy relatively low levels of vulnerability to the crime of modern slavery within their borders, and many aspects of their governments' responses to it are comparatively strong. Nonetheless, businesses and governments in G20 countries are importing products that are at risk of modern slavery on a significant scale. Looking only at the "top five" at-risk products in each country identified by our analysis, G20 countries are collectively importing US\$354 billion worth of at-risk products annually.

Of greatest concern is the continuing trade in coal from North Korea, alongside other products that are subject to UN Security Council sanctions. However, most of the at-risk products examined for this report are not subject to existing sanctions. Rather, information about risk of modern slavery can be found in research and media reports, and occasionally court cases. G20 countries are only just beginning to respond to this risk, through a growing focus on modern slavery in the supply chains of business and government, but existing efforts are not nearly enough. The Government Response Index reveals that more than half of the G20 countries are yet to formally enact laws, policies or practices aimed at stopping business and government sourcing goods and services produced by forced labour (Argentina, Australia, Canada, India, Indonesia, Japan, Mexico, Russia, South Africa, Saudi Arabia, South Korea, and Turkey). The exceptions are China, Brazil, France, Germany, Italy, UK, and the United States, each of which has begun to take some steps in this regard. Australia has announced it will introduce supply chain transparency laws in the second half of 2018.

Government responses

While much more needs to be done to prevent and respond to modern slavery, the Government Response Index suggests that national legal, policy, and programmatic responses to modern slavery are improving, with an upward trend overall in ratings for government responses. Globally, governments are taking more action to strengthen legislation and establish coordination and accountability mechanisms. Protection measures are being strengthened,

There is an urgent need to

prioritise prevention, through

a focus on discrimination and

safe migration.

with improvements in access to justice for adults and children in some countries. Nonetheless, in every country, there are enormous gaps between the estimated size of modern slavery and the small number of victims that are identified. This suggests efforts that exist on paper are not being implemented effectively.

Furthermore, in many countries, critical gaps in services remain, with 50 percent of countries excluding either migrants, men, or children from accessing services. Not only are certain groups of victims not being identified, even when they are detected they are not able to access support and other services.

Moreover, high-GDP countries such as Qatar, Singapore, Kuwait, Brunei and Hong Kong are doing very little to respond despite their wealth and resources, while low-GDP countries such as Georgia, Moldova, Senegal, Sierra Leone and Mozambique are responding relatively strongly.

Government engagement with business on modern slavery has increased dramatically since the 2016 Global Slavery Index. In 2018, 36 countries are taking steps to address forced labour in business or public supply chains, compared to only four countries in 2016. However, these steps are often to establish the bare minimum of reporting requirements;

individual governments can do much more than they are doing to proactively engage with business to prevent forced labour in supply chains and in public procurement.

### Progress, but challenges remain

The 2018 edition of the Global Slavery Index introduces new ways to look at an existing problem, drawing on a growing data set and increasingly sophisticated analysis. This deepens our understanding of the different contexts where modern slavery is likely to flourish and helps us predict the next flashpoint. For example, it is clear that if the international community does nothing to address the enormous risks resulting from the mass displacement of hundreds of thousands of Rohingya people to temporary camps in Bangladesh, this will be the next population of deeply exploited and abused people - further compounding and reinforcing what is already a deeply entrenched conflict. It is equally clear that businesses and governments continuing to trade with highly repressive regimes such as North Korea and Eritrea are contributing to the maintenance of forced labour.

The research also highlights the responsibilities held by both low-GDP and high-GDP countries. All governments have committed to work together to achieve Sustainable Development Goal 8.7 on eradicating modern slavery. In this regard, high-GDP countries cannot simply rely on doing more of the same – there is an urgent need to prioritise prevention, through a focus on discrimination and safe migration. Equally, high-GDP countries have an obligation to

take serious and urgent steps to address the risks they are importing. They owe this obligation both to consumers in their own countries and to victims along the supply chain, where products are being harvested, packed and shipped.

This edition of the Global Slavery Index introduces important improvements to the

ways prevalence of modern slavery is measured. Building on the collaborative work undertaken with the ILO and IOM on the Global Estimates of Modern Slavery, the Global Slavery Index results reflect changes to scope, methodology, and expanded data sources. The estimates are presented as a stock (or point in time) calculation rather than a flow (total over a period of time), include state imposed forced labour, and better estimates of sexual exploitation, and children in modern slavery. Further, we were able to count exploitation where it occurred more consistently due to a considerably larger number of national surveys.

As a result of these advancements, the national prevalence estimates are not comparable with previous editions of the Global Slavery Index. Nonetheless, the strengthened methodology reflects stronger data, increased levels of data, and more systematic coverage of different forms of modern slavery. As such, while comparability from previous years is lost, the changes are justified by the need to continually improve our knowledge base.

#### Recommendations

### 1 / Governments and businesses prioritise human rights in decision making when engaging with repressive regimes.

- » Deliver on financial and trade restrictions imposed by the UN Security Council, such as those in place against North Korea.
- » Conduct due diligence and transparency of business operations, to ensure that any trade, business or investment is not contributing to or benefiting from modern slavery (or other human rights abuses).
- » Establish active efforts to drive positive social change through economic and business relationships.

## 2 / Governments proactively anticipate and respond to modern slavery in conflict situations.

- » Create protective systems to identify and assist victims, and at-risk populations both during conflict and in postconflict settings (including in neighbouring countries).
- » Collect and preserve evidence to ensure perpetrators can be punished.
- » Prioritise international cooperation to investigate and prosecute perpetrators.

## 3 / Governments improve modern slavery responses at home.

- » Improve prevention, including through prioritising safe migration and steps to combat deep discrimination, whether against ethnic minorities, women and girls or migrants.
- » Close the gap between the estimated size of modern slavery and the small numbers of victims that are detected and assisted, through implementing laws to identify victims. If laws are not working, the question should be asked why, so barriers can be found and overcome.
- » Ensure labour laws protect all workers, including migrant workers, temporary and casual workers, and all people working in the informal economy.
- » Ensure all victims can access services, support and justice, whether they are male, female, children, foreigners or nationals and regardless of migration status.

## 4 / G20 governments and businesses address modern slavery in supply chains.

- » Conduct due diligence and transparency in public procurement to guarantee public funds are not inadvertently supporting modern slavery.
- » Conduct due diligence and transparency in private supply chains, using legislation that is harmonised across countries.
- » Ensure the ethical recruitment of migrant workers, including through prohibiting charging workers fees to secure work and withholding identification documents.

## 5 / Governments prioritise responses to violations against women and girls.

- » Eliminate all forms of violence against women and girls.
- » Eliminate harmful practices such as child, early and forced marriage and female genital mutilation.
- » End abuse and exploitation of children.
- » Facilitate safe, orderly and responsible migration.

Country level recommendations can be found on the country pages on the website. Regional level recommendations can be found in the forthcoming region reports.

## ABOUT THE INDEX

#### Walk Free Foundation

Modern slavery is a complex and often hidden crime that crosses borders, sectors, and jurisdictions. The Walk Free Foundation believes that a strong multifaceted approach is needed to end modern slavery. This includes building a robust knowledge base to inform action, driving legislative change in key countries and harnessing the power of businesses and faiths. Through a combination of direct implementation, grassroots community engagement, and working in partnership with faiths, businesses, academics, NGOs, and governments around the world, the Walk Free Foundation believes we can end modern slavery.

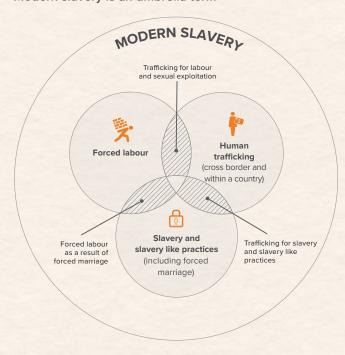
The Walk Free Foundation provides the Secretariat for the Bali Process on People Smuggling, Trafficking in Persons and Related Transnational Crime, and champions business sector engagement in this regional program. It is also advocating strongly for all leading global economies to enact laws to ensure all organisations are held accountable for taking proactive steps to remove modern slavery from their supply chains. The Walk Free Foundation's Global

Slavery Index has developed world leading research to provide measurement of the size and scale of modern slavery, as well as assess country-level vulnerability and governmental responses. Together with the International Labour Organization (ILO) and the International Organization for Migration (IOM), the Walk Free Foundation developed the joint Global Estimates of Modern Slavery.

Alongside this, the Global Freedom Network is working to catalyse world faiths in the fight against modern slavery. The Walk Free Foundation is also scaling effective antislavery responses in partnership with the Freedom Fund and seed funded the global activist movement, Freedom United, whose community of eight million supporters are campaigning for change. The Walk Free Foundation continues to work with faiths, governments and NGOs throughout the world to agitate for change and support initiatives dedicated to the eradication of modern slavery in all its forms.

#### What is modern slavery?

FIGURE 1
Modern slavery is an umbrella term



#### **Terminology**

Countries use differing terminologies to describe modern forms of slavery. This includes how they describe slavery itself, but also other concepts such as human trafficking, forced labour, debt bondage, forced or servile marriage, and the sale and exploitation of children.

In this report, *modern slavery* is used as an umbrella term that focuses attention on the commonalities across these concepts. Essentially, it refers to situations of exploitation that a person cannot refuse or leave because of threats, violence, coercion, deception, abuse of power, or deception.<sup>1</sup>

Refer to Appendix 1 for full terminology.

#### About modern slavery

Modern slavery is a hidden crime that affects every country in the world. In the period between this Index and the last (published in 2016), modern slavery was found in many industries including garment manufacturing, mining, and agriculture, and in many contexts, from private homes to settlements for internally displaced people and refugees. Instances have been identified in Thai fishing, coal mining in North Korea, in the homes of diplomats in Australia, carwash stations in the United Kingdom, cocoa agriculture in Côte d'Ivoire, and cattle ranching in Brazil, just to name a few examples.

Modern slavery impacts on all of us, from the food we consume to the goods we purchase. It is everyone's responsibility to address and eliminate this crime everywhere it occurs.

Nearly every country in the world has committed to eradicate modern slavery through their national legislation and policies. Governments have a central role to play by enacting legislation, providing safety nets to their populations, and pursuing criminals who participate in this heinous crime. As no single actor can address all these challenges, governments need the support and engagement of the private sector, civil society, and the community at large.

#### The Index

The Global Slavery Index is a tool for citizens, non-government organisations (NGOs), businesses, and governments to understand the size of the problem, existing responses, and contributing factors so that they can advocate for and build sound policies that will eradicate modern slavery.

All supporting data tables and methodology are available to download from the Global Slavery Index website: www.globalslaveryindex.org.

## **METHODOLOGY**

## Estimating prevalence

In 2017, the inaugural Global Estimates of Modern Slavery were produced by the ILO and the Walk Free Foundation in partnership with IOM. The regional estimates produced through this collaboration form the starting point for the national level estimates presented here for 167 countries.

These national estimates were calculated<sup>2</sup> using individual and country-level risk factors of modern slavery. The analysis draws on data from nationally representative surveys implemented through the Gallup World Poll, including a module on modern slavery in 48 countries, and data from the Global Slavery Index Vulnerability Model. The final set of risk factors were selected from an

exhaustive list of variables to optimally predict confirmed cases of forced labour and forced marriage. The model was then used to generate average predicted probabilities of modern slavery by country. The regional totals in the 2017 Global Estimate were then apportioned based on each country's average predicted probability of modern slavery. A final calculation accounting for state imposed forced labour was performed to reach the final estimated prevalence of all forms of modern slavery.

A detailed description of the methodology is set out in Appendix 2: Part B.



Interviewer for Gallup conducting an interview in Nepal.

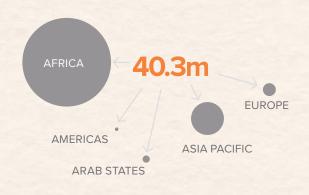
Photo credit: Gallup

FIGURE 2
Estimating the prevalence of slavery at the national-level





- 1 / Individual and country-level risk factors were identified and then used to build a model that predicts modern slavery. This drew on data from the Global Slavery Index Vulnerability Model and nationally representative surveys.
- 2 / Individual predictions were aggregated into country-level risk scores.





- Regional-level population estimates of modern slavery from the 2017 Global Estimate were allocated to individual countries in the region, proportionate to each country's relative risk.
- The number of victims was then estimated by applying the country prevalence estimate to population data for each country and estimates of state imposed forced labour added to arrive at the final estimate of all forms of modern slavery.

## Measuring vulnerability

The Global Slavery Index Vulnerability Model is built on statistical testing and processes to identify the factors that explain or predict the prevalence of modern slavery. The 2018 Vulnerability Model provides a risk score for 167 countries based on an analysis of data covering 23 risk variables across five major dimensions.

A detailed description of the methodology is set out in Appendix 2: Part A.

FIGURE 3 Vulnerability Model 2018



### Measuring government response

The Government Response Index provides a comparative assessment of the legal, policy, and programmatic actions that 181 governments are taking to respond to modern slavery. This is based on data collected on 104 indicators that are relevant to understanding how each government is tracking towards achieving five milestones:

- 1/ Survivors of slavery are identified and supported to exit and remain out of slavery.
- 2 / Criminal justice mechanisms function effectively to prevent modern slavery.
- 3 / Coordination occurs at the national and regional level, and governments are held to account for their response.
- **4/** Risk factors such as attitudes, social systems, and institutions that enable modern slavery are addressed.
- **5** / Government and business stop sourcing goods and services produced by forced labour.

A detailed description of the methodology is set out in Appendix 2: Part C.

FIGURE 4
Government Response Index 2018



# 02 ESSAYS

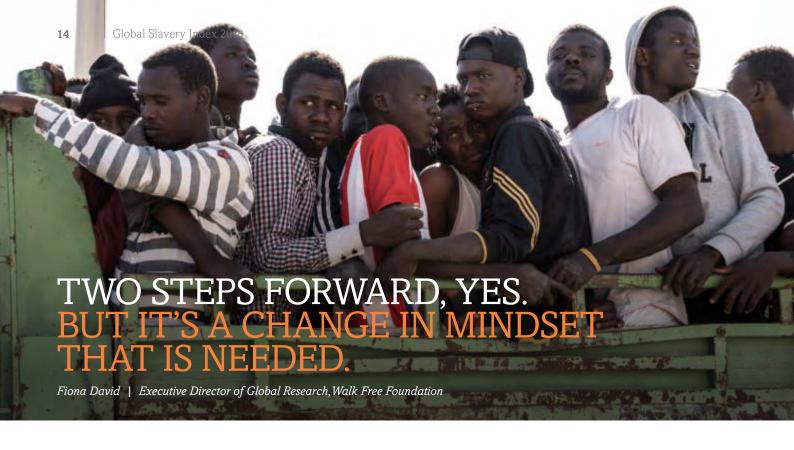
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Jacqueline Joudo Larsen   Senior Research Manager, Walk Free Foundation	

Rahima Khartoum holds a photograph of her son, 14 year old trafficking victim Din Mohammad, July, 2015 in Shamlapur, Bangladesh. Three months earlier, Mohammad left his Rohingya settlement in Bangladesh with a man who told him he could take him to a good job in Malaysia for free. He left without telling his parents. Two months ago his parents got a call from one of their son's friends saying that they were in a camp in Thailand and the traffickers had sold them, but they had been rescued. They haven't heard from anyone since that phone call.

Photo credit: Shazia Rahman/Getty Images







In November 2017, a slave auction was broadcast around the world.

CNN journalists travelled to a town not far from Tripoli, Libya and captured shocking video footage of the sale of 12 Nigerian men.

This was not an isolated occurrence.

Many African people seeking to migrate via Libya to Europe through irregular channels — either to improve their economic prospects or to seek asylum — are falling victim to unthinkable extremes of abuse, including modern slavery.

Increasingly restrictive approaches, applied by the European Union in an effort to curb the flow of migrants from Libya by returning migrants back to detention centres in that country, have exacerbated the issue.

Far from being a source of order or security, these detention centres have proved to be little more than staging pens for human merchandise subjected to rape, overcrowding, organised extortion, and sale into slavery.

While the EU agreed to fund an emergency program of voluntary repatriations from Libya's detention centres in November 2017,¹ by February 2018 there were still at least 700,000 migrants in Libya, some 4,400 of whom were in immigration detention.²

Furthermore, while the European action has provided a much-needed emergency response, this has not addressed the underlying cause of the crisis – failing policies on migration and refugees.

Since we published the last Global Slavery Index in 2016, there have been many successes in terms of increased efforts to address modern slavery.

The 2018 Global Slavery Index confirms that governments are taking more of the steps we ask of them to respond to modern slavery – strengthening laws, training police, providing services and shelters to victims, and engaging with business on supply chain transparency.

Businesses and governments are increasingly accepting the reality that when modern slavery occurs in one country, the direct results will be felt throughout international supply chains.

We are seeing a stronger focus on collaboration and measurement as key foundations of truly coordinated, informed, and impactful responses to modern slavery. The UN Security Council has made two resolutions on human trafficking, one in 2018 imposing sanctions for individuals involved in the Libyan slave-trade.

While this is all progress, the haunting CNN footage of a slave-auction conducted in 2017 must act as a sharp reminder that these successes take place against a backdrop of increasingly extreme and blatant patterns of modern slavery. Our small steps forward must also be measured against the reality that we remain, as an international community, unable to respond quickly and effectively to prevent the atrocities that we know will create a breeding ground for further abuses, including slavery.

For example, in 2015, the world was horrified when mass graves of tortured and murdered Rohingya migrants were discovered in "death camps" along the Thai–Malaysian border, to which they had been smuggled.<sup>3</sup>

These camps were used as staging pens for Rohingya migrants desperate to leave Myanmar, only to find themselves subject to extortion, torture, and human trafficking by the criminals who had been paid to "help".

Yet since conclusive evidence began to emerge in August 2017 of fresh campaigns of ethnic cleansing of the Rohingya, the international community has done little to act. As nearly 700,000

people escaped burned villages and fled to the shelter of temporary camps in Bangladesh, UN agencies warned of the risk of modern slavery in this chaotic and high-risk environment.<sup>4</sup> Disagreement in the UN Security Council Permanent Membership meant that a binding resolution was scaled back to a Presidential Statement in December 2017.<sup>5</sup> In the absence of any coordinated international response, some 800,000 people remain living in camps and shelters built on the mud of Cox Bazar, Bangladesh.

Important questions in our pursuit to end modern slavery remain. How is it that with all we have in place to respond to modern slavery in 2018, human beings are still being sold in Libya as "big strong boys for farm work?" Why is modern slavery still so pervasive around the world? Why and how is it tolerated in the globalising economy? What are we missing?

The answers are found partly in the ever-present challenges and failures of implementation.

Laws on paper are worthless without implementation and enforcement. Police training means little if witnesses can be intimidated and judges can be bought. Or shelters operating like prisons continue to leave victims of modern slavery with few, if any, alternatives.

This underscores the enormous value of transparency and reporting — a commendable feature seen in the publication of recent audits of police responses in the UK.<sup>6</sup> If all governments were genuinely open to transparently examining the effectiveness of their efforts, we would not have tens of millions of people in modern slavery.

The answers also lie in deeper examination of drivers of vulnerability to this crime, not only in matters related to poverty, access and governance found in low-income countries, but also in the gaping holes in protection that developed countries create when they enact sweeping immigration, crime control, or social welfare policies that undermine their other efforts to stop modern slavery.

We have to shift from individual to collective approaches to solving what are truly global problems.

It is unthinkable that in 2018, world leaders have managed to make global, legally binding agreements on everything from outer space to carriage of goods by sea, but they have yet to agree on a framework that would enable the safe movement of people globally. The withdrawal of the United States from international discussions about the UN Global Compacts on Refugees and Migration is a massive

failure of leadership.

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Finding solutions to modern slavery must also be integrally connected to efforts to prevent and end protracted conflict situations.

It is not enough to simply blame conflict on those who hold the weapons. We must also apply responsibility to those who have the power to influence situations but choose not to act. As the outgoing UN High Commissioner for Human

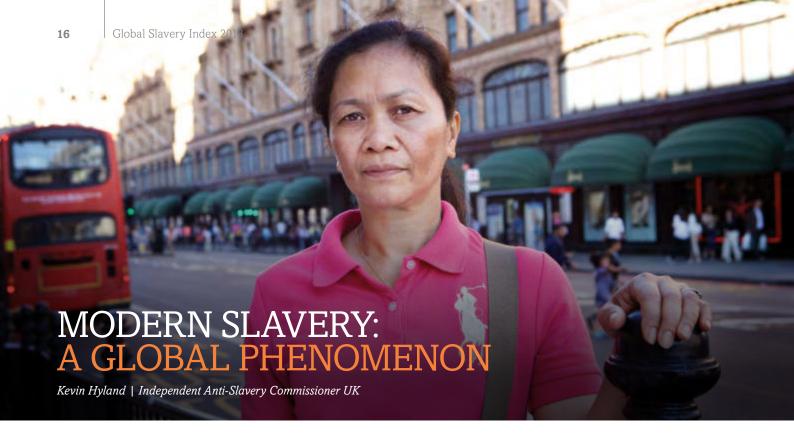
Rights said, "while conflict is perpetrated by criminals...the responsibility for the continuation of so much pain lies with the five permanent members of the UN Security Council. So long as the veto is used by them to block any unity of action, when it is needed the most, when it could reduce the extreme suffering of innocent people, then it is they—the permanent members—who must answer before the victims."

In this regard, France and the UK are to be commended for their leadership proposing the five permanent members of the UN Security Council voluntarily suspend the use of their veto rights in situations involving mass atrocities.

Millions of victims of conflict, and with them millions of victims of modern slavery, are depending on the remaining permanent members of the Security Council, United States, China, and Russia to agree to this life saving approach.

A picture taken on June, 2017 shows irregular migrants being transported to a detention centre in the Libyan coastal town of Zawiyah, 45 kilometres west of the capital Tripoli, after their rescue while attempting to reach Europe. Media and UN reports have confirmed that large numbers of migrants in Libya are being traded and sold with detention centres being used as staging posts.

Photo credit: Taha Jawashi/AFP/ Getty Images



Modern slavery can be found in every corner of our globalised world. In 2017, the Global Estimates of Modern Slavery estimated that 40.3 million individuals were living in modern slavery; with individuals being exploited for the purpose of sexual exploitation, forced labour, forced marriage, domestic servitude, and forced criminality.

Advances in data collection have allowed us to better understand the prevalence and drivers of modern slavery, region by region and country by country. Higher rates of modern slavery have typically been associated with countries with lower economic wealth, weak rule of law,

and those affected by conflict. Whilst this remains the case, this year's Global Slavery Index highlights the significant role that more economically-developed countries have in perpetuating modern slavery. Despite their relative wealth, modern slavery crimes are taking place at an alarming rate in these countries and within their global supply chains.

. . . .

Progressive action has been taken by developed nations to combat modern slavery, such as the introduction of modern slavery legislation, and this

is to be welcomed. However, it is clear that critical gaps remain in the provision of protection for the vulnerable and in the apprehension of perpetrators.

Whilst new laws to tackle modern slavery are to be welcomed, countries also have a responsibility to

look at existing legislation and assess whether they are inadvertently generating the conditions in which exploitation can flourish. Particular cohorts of the population, such as those working in the "gig economy" or seasonal migrant workers, may be particularly vulnerable

to abuse due to weak labour laws and restrictive immigration policies. Any legislation, policy, and practice that exacerbate abuse must be repealed.

In my role as the UK's Independent Anti-Slavery Commissioner, I have seen just how much can be achieved when there is political will to tackle modern slavery, and a readiness of government, business, and civil society to work in partnership. However, it is also clear that merely having modern slavery legislation,

without the commitment or resourcing to ensure its effective implementation and enforcement, is not enough.

In 2015, the Modern Slavery Act was brought into force in the UK which, with the support of business, included a "Transparency in supply chains" provision. This provision

This year's Global Slavery Index highlights the significant role that more economically-developed countries have in perpetuating modern slavery. Despite their relative wealth, modern slavery crimes are taking place at an alarming rate in these countries and within their global supply chains.

requires businesses with a turnover of £36 million or more that provide goods and services in the UK to produce an annual statement explaining what they are doing to tackle modern slavery within their supply chains. The inclusion of this provision was an important step; however, two years on, corporate response to this requirement remains patchy at

best. In 2017, 43 of the FTSE 100 failed to comply with the basic requirements of this legislation. Even with the legislation, the UK has a long way to go to in ensuring that UK businesses are slavery-free.

The introduction of the Modern Slavery Act has undoubtedly served to raise awareness of modern slavery, resulting in year-on-year increases in the number of victims of modern slavery being identified. There is greater

understanding of the various forms of modern slavery and the prevalence of British nationals falling victim to this crime. However, greater awareness is just a starting point; we must ensure that where cases are identified they are met with a robust, professional response.

The UK's current system of support – the National Referral Mechanism – does not meet the needs of all victims and is currently being reformed. I welcome this. This is a crime that can destroy lives and we have a responsibility to protect and support victims to recover from their experiences and rebuild their lives – regardless of age, gender, or nationality.

All countries are affected by modern slavery and therefore all have a responsibility to bring an end to this scourge. Collaborative action at the local, national, and international level is required to address the conditions which make individuals vulnerable to abuse.

It is unacceptable that modern slavery continues to exist in a climate of low risk criminality and high profit reward, making it the crime of choice for criminals, who for too long have operated with impunity across the UK and beyond.

All countries are affected by modern slavery and therefore all have a responsibility to bring an end to this scourge. Collaborative action at the local, national, and international

level is required to address the conditions which make individuals vulnerable to abuse.

Through research such as this Global Slavery Index, we have a greater understanding of modern slavery across the globe. We know what the problem is, let's now act.

Elvira, 50, trafficked from the Philippines into domestic slavery in the UK

"When my husband got sick, I went to work in Qatar so I could send money for medicine back home. But the family were cheating me out of my salary. They said I could go home if I went to work for one of the sisters in London. She lived near Harrods. She'd shout at me, calling me stupid, and made me sleep on the floor by her bed. She fed me a single piece of bread and cup of tea for the whole day. I felt like I was in prison."

Photo credit: Hazel Thompson for The Guardian



Survivors of slavery and human trafficking regularly receive invitations to share their experience, whether by the media, at congressional hearings or at conferences. When the organisers are asked to expand on the nature of their requests, the typical response is: "We would love to hear your personal story, how you overcame it, and we want our audience to leave inspired." The clear assumption in these requests is that survivors will speak about their traumatic experiences of slavery.

#### The problem

The presumptive role in these requests is for survivors to provide a face to the issue and to make it real for the audience. As some of the best interpreters of modern slavery in the broadest sense, survivors' insights are wasted when they are restricted to telling personal stories. Survivors become tokenized when there is only one survivor invited to participate in an event and asked to "speak for all" survivors. Treated as an afterthought, most anti-slavery efforts assume that there are no survivors in the room, or the voices and agendas of survivors are not critical to the agenda of an event, publication, or exhibit.

Survivors are also undervalued through a widespread assumption that they will volunteer their time and expertise. They are regularly unpaid for their contributions or even required to pay out of pocket for travel expenses. Their work products are not treated with the same considerations normally given to intellectual property, such as acquiring consent for publication or reuse.

#### Deepening our understanding

Survivors are placed in an exasperating predicament: to be heard in limited ways, with little to no compensation, or to be excluded from important conversations that affect their lives. Similar to the weariness that people of colour experience when asked to educate white people about racism, survivors of slavery are weary of being asked to share traumatic stories. What is implied is that their "personal story" is purely a story of horror and atrocity, and other important aspects of their identities are negated.

Many survivors understand the benefit of sharing some aspects of our story to raise awareness; however, our experience in slavery is not the only, nor the primary, topic that we want to discuss. We want to talk about policy change. We want to design social service programs and lead our own organisations and programs. We want to build grassroots solutions and to sustain ourselves. Like all humans, we want self-determination and autonomy, coupled with interdependence and community support.

Our personal experiences include our identities as parents, scholars, business and NGO leaders, activists, artists, lawyers, and so much more. Our experiences in slavery inform our anti-slavery efforts, but we are people, just like you. We are people who seek access to a healthy, safe, and secure life for ourselves and our communities.

As such, many survivors engaged in anti-slavery efforts have full-time jobs to make ends meet, support families, and pay off debt. Many of us desire to be actively engaged in the anti-slavery movement but we do not have the capacity to volunteer our time. Thus, our request for

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compensation and reimbursement of expenses is the same as any other professional.

While at times there are occasional legal or logistical difficulties to compensating survivors, these challenges are not insurmountable. To lay it out plainly, here are some reasons why survivors need and should be compensated:

- A request to speak, present, or give feedback on documents is a request for expert input or consultation. It is common to pay consulting fees to any subject matter expert.
- A request to appear in a venue that is away from the survivor's home or workplace involves an additional travel expense that the survivor likely cannot incur.
- To tend to health and self-care needs, pre-, post-, and during involvement in anti-slavery efforts, additional costs are incurred.
- Survivors must often use vacation or unpaid time to participate in projects and may need to make alternative child care arrangements.

#### The solution

Going forward, to be more inclusive and to ensure that survivors can contribute in meaningful ways, it is time for the anti-slavery movement to focus on developing and deepening opportunities for survivors that are not centred around sharing their trauma narrative, and to provide compensation for their time, travel, and expertise. I recommend the following actions:

- Add a line item to your budget for survivor participation and develop a fundraising plan to support it.
- If you feel unsure about how to incorporate survivors, hire a veteran survivor leader to conduct an assessment and make recommendations.
- If there are no existing survivor groups in your area, work with allied organisations to recruit people who exited slavery long before it became the social issue of the moment.
- Request anonymous survivor input through surveys of program participants. Offer gift cards in exchange for participation.

- Invite a survivor to join your Board of Directors or an Advisory Board.
- > Invite survivors to review and provide input on program plans, training curricula, and media campaigns.
- Involve survivors in creating research questions and measurement variables.
- Develop employment opportunities for survivors within your organisation and provide support for their success. These include discussing confidentiality, making workplace and cultural norms explicit, and if necessary, training other staff members on how to engage.
  - Invest in survivor leadership programs such as the National Survivor Network<sup>8</sup> in the United States, Utthan<sup>9</sup> in India, and a new international organisation that I am launching, the Survivor Alliance.<sup>10</sup>

The Survivor Alliance unites and empowers survivors of slavery around the world. Incubated in the University of Nottingham's Rights Lab,<sup>11</sup> it focuses on developing a global network of trained survivor leaders. In addition to

empowering survivor voices in the anti-slavery movement, the Survivor Alliance shifts the focus from the moment of emancipation and the immediate aftermath, to the long journey of (re)building a life in freedom.

Until we actively support the development of survivor leaders, there will be a dearth of such leaders to call on to support anti-slavery efforts. We believe the wider movement has a moral obligation to help make this happen.

The more successful our anti-slavery efforts become, the more survivors will live among us. Survivors will demand a prosperous life and the ability to sustain our freedom.

Freedom is more than the absence of slavery.

It is imperative that our movement integrate survivors as equal members of our community. We are here to build with you. When we knock on your door, please invite us in. We do not want our words to continue to fall on deaf ears, but rest assured, we will not be silent.

Minh Dang discusses potential survivor-informed research projects with Valentine Nkoyo, Director of Mojatu Foundation and Survivor Alliance Membership Coordinator, and Julie McGarry, University of Nottingham Associate Professor of Medicine and Health Sciences.

Photo credit: University of Nottingham



No one speaks in favour of modern slavery, and slavery has no real friends. At best, it can be said that slavery has temporary acquaintances, people who rely on slavery for short term profit.

No country or business can build its future on slavery. Indeed, slavery thwarts economic empowerment and puts a ceiling on growth.

All sides of politics are unified behind this point, a rarity in today's fractured policy landscape. Likewise, business has led its own reform and has shown its willingness to work with government in joint endeavours. The leaders of all faiths have come together and shared their common abhorrence of slavery in their teachings.

Still, despite this leadership many continue to benefit from this often invisible crime, or resign themselves to accepting modern slavery as an inevitability.

Modern slavery is a human condition of our own making which can be ended by concerted action. It is a multi-billion dollar transnational criminal business which, on any one given day in 2016, ensnared 40.3 million people.

The scale of this truly global and abhorrent practice is staggering and will not be rectified until there is significant cooperation between business and government. One of the first areas to address is rooting out slavery where it exists in supply chains, be they of major businesses or governments.

Many governments are the biggest buyers of goods and services in their countries. Public procurement represents, on average, around 12 percent of a country's GDP and it is estimated to be in the order of the GDP which equals to US\$1.6 trillion worldwide.

While some governments are setting reporting requirements for corporations, there are a paucity of measures directed at minimising the risks of modern slavery in public procurement in these policy responses. Governments need to get their houses in order.

This is a failure of leadership and an insult to business, which is tasked with meeting high expectations by policy makers who fail to measure themselves to the same standards. Continued inaction by governments exposes them to enormous reputational risk and economic consequences.

Thankfully, there are green shoots of progress. This year's Global Slavery Index finds 36 countries are taking steps to investigate forced labour in business or public supply chains, up from just four countries in 2016. Of the 36 countries, 25 are taking steps on government procurement. And there is no reason why the figure can't be higher.

The countries which collaborate beyond their own borders to adopt regional approaches to stamp out slavery will be rewarded with stronger societies, robust trade, and sustainable growth. Those that take steps to clean up labour issues at home will send the best possible signals to the investment world.

For investment destinations that are both accountable and attractive, there is almost no shortage of capital available. As more is learned about slavery, and how to measure it, investors will increasingly steer clear of opportunities that

come with exposure to slavery risk. Business leaders are acutely aware of the attractiveness of certain investment destinations and often labour issues and other social problems are serious deterrents to new ventures.

In the short-term, slavery may fill criminals' pockets with illegal profits, but in the long-term, the national profits of a country that allows slavery to thrive will be dragged down. Economic empowerment is the key to long-term growth and so it is no surprise that slavery, more than many other factors, cruels sustainable development.

As scrutiny increases down the long tail of multi-national companies' supply chains, countries that continue to allow modern slavery within their borders are at ever increasing risk of tarnishing their reputation and losing out on trade.

But slavery is not just a problem for developing countries seeking investment.

The great challenge with modern slavery is that not only is it hidden within the depths of criminal networks that are trafficking people for exploitation, but

modern slavery also occurs where mainstream industries meet informal economies.

Slavery exists in all corners of the planet and touches us all through trade and consumer choices.

The Walk Free Foundation has engaged with the G20 process to ensure that the countries responsible for 80 percent of the world's economic activity take responsibility. The decision of the G20 in Germany in 2017 to prioritise the issue of modern slavery and develop policy responses was a huge step forward. It is now time for each of those countries to act.

We are encouraged by developments in G20 countries including Australia, Brazil, France, Germany, Italy, the United Kingdom, and the United States on public procurement. But, as the 2018 Global Slavery Index finds, there is still a long way to go.

Businesses and governments in G20 countries are importing masses of products that come with significant risks of being produced using modern slavery.

Our analysis found G20 countries are collectively importing at least US\$354 billion worth of at-risk products annually – for example seafood from Thailand, electronics from Malaysia, or coal from North Korea.

Business too has a critical role to play here. The old paradigm of name and shame has not delivered comprehensive reform, rather it has often discouraged businesses from looking too closely in case they discover abuses.

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seek out abuses in their supply chains, and reward leaders who take on the responsibility and challenge of addressing modern slavery. We need to celebrate the discovery of slavery as the first step to remedy the problem and empower those afflicted. This will drive businesses to ensure they are not enabling this crime.

Investors are more alert to this issue than ever before and are increasingly demanding businesses act with impact. Some of the largest institutional investors in the world are telling major corporations to improve

their social footprint or face losing out on billions of dollars of investment.

True business leaders know that creating sustainable supply chains can contribute positively towards growth, improve competition, provide job opportunities, and bring families out of poverty. This is a sustainable business model.

By providing decent work or demanding their suppliers and contractors do, companies are investing in the futures of communities. Profits and purpose are not mutually exclusive. In the long term, everyone loses out from slavery.

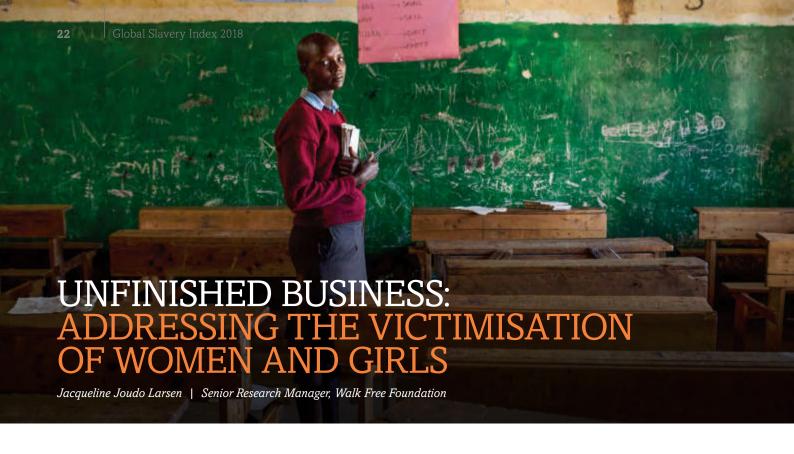
We have a tremendous opportunity to capitalise on the progress made and the commitment of so many to end the misery of 40.3 million of our fellow human beings.

It is an opportunity we must not let slip.

Yum, 29, sold from Cambodia on to a Thai fishing boat

"One of my friends said he and a few others were leaving to find work. The next day we got a taxi and headed for Thailand. A man offered us £150 to work on a construction site, but drove us to a busy sea port instead. We sailed for days before they told us we'd been sold to the Thais to work as fishermen. After nine months at sea, I knew I had to escape. Now I have a newborn baby, a wife and no prospects of work. Maybe I will try to find work again in Thailand"

Photograph credit: George Nickels for The Guardian



Although modern slavery occurs in every corner of the globe and affects many regardless of race, gender, religion, and socio-economic status, females are disproportionately affected. Nearly three-quarters (71 percent) of modern slavery's victims are women and girls. This varies depending on the form of slavery but, notably, there are more female than male victims across all forms of modern slavery, except for state-imposed forced labour. The 2017 Global Estimates of Modern Slavery revealed that women and girls account for 99 percent of victims of forced labour in the commercial sex industry, 58 percent in other sectors (for example, domestic work), 40 percent of victims of forced labour imposed by state authorities, and 84 percent of victims of forced marriage.

There are many examples of women in forced labour around the globe. Women are trafficked from Nigeria to southern and western Europe, or from Malaysia to Australia, for commercial sexual exploitation. Large numbers of women travel from Southeast Asia to the Middle East for domestic work only to face extreme exploitation on arrival. Many more victims are exploited closer to home. For example, Ugandan women and girls are trafficked to South Africa and the Middle East where they often end up exploited in domestic work or the sex industry. Within the Caribbean region, women are trafficked from Guyana and Jamaica to neighbouring nations such as Antiqua and Barbuda.

Some forms of modern slavery, such as forced marriage, can be difficult to parse out from cultural practice. Forced marriages occur in both developing and developed

nations, with women and girls being forced to marry for many reasons, some of which are closely linked to longstanding cultural practices and understandings of gender roles, while others reflect far more pragmatic economic reasons relating to income generation and alleviating poverty. In some parts of the world, young girls and women are forced to marry in exchange for payment to their families, the cancellation of debt, to settle family disputes, or to secure another person's entry into the country. In some societies, a woman can still be inherited by the brother of her deceased husband and forced marriages may occur when a rapist is permitted to escape criminal sanctions by marrying the victim, usually with the consent of her family. In countries with significant levels of conflict, women are abducted by armed groups and forced to marry fighters.

Of course, slavery does not spare men and boys. Men are more likely than women to be exploited by the state and in many industries, such as agriculture, mining, and construction. While a focus on female victims should not come at the expense of male victims, who must also be supported and empowered, an understanding of the gender differences in victimisation can shed light on where prevention and victim identification efforts should start. Findings from the Global

Estimates of Modern Slavery reflect highly gendered patterns of employment and migration that see more women than men employed in informal and unregulated sectors – areas of work where heightened vulnerability to abuse and exploitation has been well-documented.

The disparity begs the question: what makes women and girls more vulnerable to modern slavery? Our research points to the relevance of broader patterns of human rights abuses that disproportionately affect women and girls, including domestic and sexual

violence and discriminatory beliefs and practices around access to property, education, and even citizenship. Globally, women are more likely than men to live in extreme poverty and to report food insecurity. In turn, this impacts access to education with data revealing those living in poor households have higher rates of illiteracy, and of those, women in poor households are the most disadvantaged of all.16 Lack of education restricts employment opportunities for women and globally, women's labour force participation is 31 percentage points below that of men.<sup>17</sup> In light of this, it comes as no surprise that women have access to fewer economic resources than men, for example, they make up just 13 percent of agricultural landowners across the globe.<sup>18</sup> Without access to education, better employment opportunities, and economic resources, women are at greater risk of modern slavery.

Cultural practices and values, family structures, lack of autonomy, few employment opportunities, and access to education all play a part in creating risks that impact women and girls more than they do men and boys. When a decision is made to send a son to school and a daughter into the fields or to marry, their life outcomes diverge substantially. Although in many instances forced or child marriages are believed to be the best way to secure a daughter's future, there are significant health consequences. Girls who are married young are at higher risk of contracting sexually transmitted diseases, obstetric fistulas, and death during childbirth. Such marriages place women and girls at greater risk of being subjected to other forms of exploitation, including sexual exploitation, domestic servitude, and other forms of forced labour. For girls who are married young, education moves even further out of reach.

Unequal risk for men and women is not only the result of cultural practices and economic decision-making. Discriminatory legislative practices also exacerbate the disadvantaged position of women and girls; these include unequal inheritance rights, husbands having the legal right to prevent wives from working, no legal protection from domestic violence, exemption from prosecution for rapists if they are married to, or marry, their victim.<sup>19</sup> The numerous gaps in legal protection for women and girls must be addressed to help break the cycle of inequality.

Fundamentally, modern slavery cannot be addressed in isolation. It is both a symptom and a cause, and in

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tackling other fundamental rights issues through the Sustainable Development Goal (SDG's) – eliminating all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation (SDG 5.2), eliminating all harmful practices, such as child, early, and forced marriage and female genital mutilation (SDG 5.3), ending abuse, exploitation, and trafficking of children (SDG 16.2), and facilitating orderly, safe, and responsible migration and mobility of people, including through implementation of planned and well-

managed migration policies (SDG 10.7) – we will reduce the vulnerability of women and girls to modern slavery. Small steps in the right direction are being taken in some regions. In the forced marriage space, raising community awareness on the dangers of forced marriage, human rights, and the importance of education for girls in bridging the inequality gap have shown some progress in combating modern slavery.<sup>20</sup> Front-line organisations such as the Freedom Fund and their local partners have made significant inroads into addressing the slavery of women and girls by adopting a wraparound approach that tackles the root causes.<sup>21</sup>

At the heart of these issues lie traditions and systems that perpetuate and propagate the discrimination and exploitation of women. In his 2018 International Women's Day address, the UN Secretary-General António Guterres noted that the push for gender equality is "...the unfinished business of our time." In the wave of activism that has propelled the #MeToo and #TimesUp campaigns across the globe, there is no better time to tackle the root causes of vulnerability among women and girls.

Anita, 15, forced into child marriage in Kenya.

"I was out grazing the cows when my father said it was time to get married. I was woken up early and circumcised. The elders said the man was to be my only husband. He was 55. I was very confused. I was only 10. Nine months later, because I had not given him a baby, he began tasking me with the difficult jobs. I decided I had to escape – he beat me so hard my leg wouldn't stop bleeding. I was taken in by the Catholic Sisters and started school in 2013. I hope to be a doctor."

Photo credit: Kate Holt for The Guardian

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A picture taken in November, 2017 shows African migrants sitting in a packed room with their beds and blankets, at the Tariq Al-Matar detention centre on the outskirts of the Libyan capital Tripoli. These detention centres centres have been used as staging pens for human trafficking.

Photo credit: Taha Jawashi/AFP/Getty Images





#### **GLOBAL FINDINGS**

••••

It is a confronting reality that even in the present day, men, women and children all over the world remain victims of modern slavery. They are bought and sold in public markets, forced to marry against their will and provide labour under the guise of "marriage," forced to work inside clandestine factories on the promise of a salary that is often withheld, or on fishing boats where men and boys toil under threats of violence. They are forced to work on construction sites, in stores, on farms, or in homes as maids. Labour extracted through force, coercion, or threats produces some of the food we eat, the clothes we wear, and the footballs we kick. The minerals that men, women, and children have been made to extract from mines find their way into cosmetics, electronics, and cars, among many other products.

This is modern slavery. It is widespread and pervasive, often unacknowledged, and its extent was previously believed to be unknowable. In 2017, the Walk Free Foundation and the International Labour Organization (ILO), together with

the International Organization for Migration (IOM), developed the Global Estimates of Modern Slavery, which provides the best available data and information about the scale and regional distribution of modern slavery. These estimates provide the starting point for this report, the Global Slavery Index. The national estimates presented here were calculated by the Walk Free Foundation on the basis of a predictive model that accounted for individual and country-level

risk factors and resulting prevalence estimates were then adjusted to ensure regional totals were aligned with the regional totals in the Global Estimates of Modern Slavery.

An analysis of the national estimates in this Global Slavery Index confirms that modern slavery is a crime that affects all countries globally, including, perhaps surprisingly, highly developed countries. While an understanding of prevalence is critical to formulating sound policy responses to modern slavery, equally important is building our

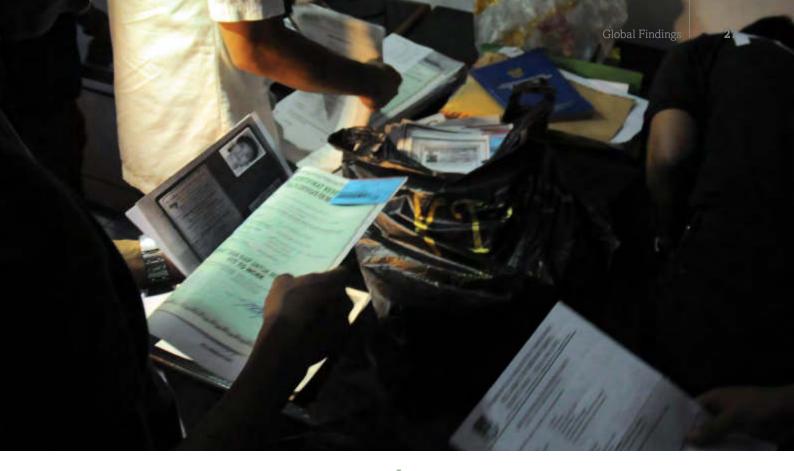
understanding of what is driving prevalence. For this reason, the national prevalence estimates are analysed in the context of results of the Vulnerability Model, which provides important context for understanding the national results. See p.156 for full data table.

Modern slavery is a crime that affects all countries globally, including, perhaps surprisingly, highly developed countries.

In this chapter, we also consider the important issue of government responses to modern slavery. The Government Response Index provides a comparable measure of the steps being taken by 181 countries across 104 indicators of good practice. An analysis of these findings confirms that while there has been important progress made since the publication of the last Global Slavery Index in 2016, there are still

critical gaps, and responses to them need to be developed. See p.192 for full data table.

Overall, our findings confirm that modern slavery remains a critical issue for all countries. Just as responding to environmental concerns cannot be the task of one country alone, responding to modern slavery is a challenge that requires commitment and effort from all countries.



Police inspect a crime scene in Jakarta 2017, following the arrest of suspects involved in human trafficking from Indonesia to the Middle East via Malaysia.

Photo credit: Dasril Roszandi/Nur Photo via Getty Images.

# What does the data tell us about modern slavery?

It is widely acknowledged that measuring modern slavery is a difficult undertaking, not least because no single source provides suitable and reliable data on all forms of modern slavery. In developing the Global Estimates of Modern Slavery, the Walk Free Foundation and the ILO adopted a methodology that combined survey research involving face-to-face interviews with more than 71,000 people in 53 local languages with administrative data on victims of trafficking who had been assisted by the IOM. An estimate of forced labour imposed by state authorities was derived from validated sources and systematic review of comments from the ILO supervisory bodies with regard to the ILO Conventions on forced labour.

An estimated 40.3 million men, women, and children were victims of modern slavery on any given day in 2016.<sup>1</sup> Of these, 24.9 million people were in forced labour and 15.4 million people were living in a forced marriage.

Women and girls are vastly over-represented, making up 71 percent of victims. Modern slavery is most prevalent in Africa, followed by the Asia and the Pacific region.

Although these are the most reliable estimates of modern slavery to date, we know they are conservative as significant gaps in data remain. The current Global Estimates do not cover all forms of modern slavery; for example, organ trafficking, child soldiers, or child marriage that could also constitute forced marriage are not able to be adequately measured at this time. Further, at a broad regional level there is high confidence in the estimates in all but one of the five regions. Estimates of modern slavery in the Arab States are affected by substantial gaps in the available data.<sup>2</sup> Given this is a region that hosts 17.6 million migrant workers,<sup>3</sup> representing more than one-tenth of all migrant workers in the world and one in three workers in the Arab States, and one in which forced marriage is reportedly widespread, the current estimate is undoubtedly a significant underestimate.

### NOTE ON RECRUITMENT OF CHILDREN BY ARMED FORCES & ORGAN TRAFFICKING

Conceptually, the practices of recruiting child soldiers and trafficking persons for removal of their organs fall under the concept of modern slavery. Recruitment of children by armed forces and groups is expressly prohibited by various treaties,<sup>4</sup> while the UN Trafficking Protocol specifically designates organ removal as a form of exploitation associated with the crime of trafficking in persons.<sup>5</sup> Unfortunately, due to the limits of existing data, it was not possible for the Global Estimates of Modern Slavery to measure and include the scale of trafficking for organ removal or the recruitment child soldiers. Accordingly, the estimates in this Global Slavery Index do not capture these practices.

This, however, should not be taken as an indication of diminished importance of these forms of modern slavery. The following sections provide a brief overview of the existing state of knowledge on both trafficking for organ removal and recruitment of child soldiers.

#### Trafficking in persons for organ removal

While there is only limited information compiled globally on trafficking persons for the purpose of organ removal, it is possible to get some insight by looking at the broader statistics on organ transplants. An estimated 126,670 solid organ transplants were performed worldwide in 2015.6 The World Health Organization (WHO) conservatively estimates that the illegal organ trade comprises approximately 10 percent of global transplant activity.7 Revenue from the illegal trade is estimated to range between US\$840 million and US\$1.7 billion.8 The black market organ trade has been documented in countries as diverse as India, Pakistan, Kosovo, and the Philippines.9 What is unclear is the extent to which coercion is being applied, and in what circumstances. It is, however, certain that unscrupulous traffickers and brokers target vulnerable people, including irregular migrants and refugees on the move.10

It appears from the limited number of cases that have been investigated and prosecuted that international brokers are pivotal to the series of transactions involved in this crime, particularly in terms of receiving the highest profits. It is usually these brokers who fix the price for the illegal transplant, as well as the "fee" for the organ supplier, dependent on the broker's insight into the "market" and the circumstances of the recipients.

Poverty and corruption are two of the principal underlying factors in organ trafficking. Sellers give up their organs out of economic necessity and, for most buyers, who may have been waiting on legitimate transplant lists for months, desperation and frustration usually push them to commit the illegal act.<sup>13</sup> In some parts of India, poor people use their kidneys as collateral for money lenders. Researchers have documented instances of kidneys sourced from the "kidney belt" region of southern India sold to clients in Sri Lanka, the Gulf States, the UK, and the US.<sup>14</sup>

Developed countries such as the US, Canada, Australia, and the UK receive organs from most of the world's developing countries, including India, China, the Philippines, and Pakistan.<sup>15</sup> Organ transplants tend to be carried out more in wealthy countries due to their better economic conditions and technological capabilities. Sale of organs is illegal in many developing countries, with the exception of Iran where paid donation is permitted but strictly regulated.<sup>16</sup>

#### Recruitment of children by armed forces

The use of children in armed conflicts is clearly and directly linked to the trafficking and sale of children and is therefore globally recognised as a form of modern slavery.<sup>17</sup> Due to the hidden nature of this crime, scholars have argued in the past that "the total number of child soldiers in each country, let alone the global figure, is not only unknown, but unknowable." Similarly, it is noted in the Global Estimates of Modern Slavery that some forms of modern slavery which did not involve elements of forced labour (such as organ trafficking) are not captured due to a lack of reliable data.<sup>19</sup>

One obvious but often overlooked prerequisite for the involvement of children in armed conflicts is the presence and extent of conflict around the world. That is, when conflicts persist along with the presence of armed groups open to child involvement, then there continue to be child soldiers.<sup>20</sup> Additionally, the extraordinary complexity surrounding the world's current conflicts has reportedly contributed to an increase in the number of children at risk.<sup>21</sup>

Beyond those necessary conditions, children may become involved in armed conflicts for a host of interrelated reasons. Some of the specific factors that influence child involvement in conflict include physical and food security, family and peer networks (children may be heavily influenced by preexisting networks, such as where other family members have joined armed forces), financial incentives, coercion, status, and cultural and religious identity.<sup>22</sup>

Although there are no reliable estimates on the number of children involved in armed conflicts, the UN provides some information on documented cases of children involved in armed conflict. In 2016, there were globally at least 4,000 instances of children recruited and used in armed conflict by government forces and more than 11,500 such instances by non-state armed groups, notably in Africa, Asia, and Latin America. <sup>23</sup> This reflects cases recorded in Afghanistan, the Central African Republic, Colombia, Democratic Republic of the Congo (DRC), Iraq, Lebanon, Libya, Mali, Myanmar, Nigeria, Somalia, Sudan, Syria and the Philippines. <sup>24</sup>

Notwithstanding these critical data gaps, the 2018 Global Slavery Index presents national-level estimates for 167 countries based on the proportion of the population that is estimated to be in some form of modern slavery.

The 10 countries with the highest prevalence of modern slavery are (Figure 1):

1/ North Korea	6 / Mauritania
2 / Eritrea	7 / South Sudan
3 / Burundi	8 / Pakistan
4 / the Central African Republic	9 / Cambodia
5 / Afghanistan	10 / Iran

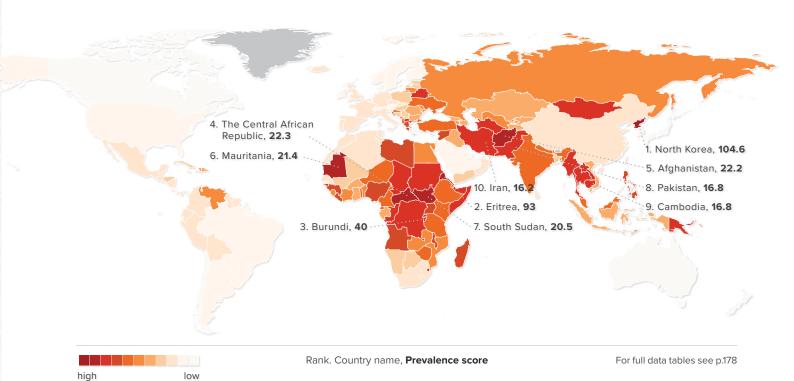
An analysis of the ten countries with highest prevalence indicates a connection between modern slavery and two major external drivers- highly repressive regimes and conflict. As data in this Global Slavery Index confirm, several of these countries— the Central African Republic, Afghanistan, South Sudan, and Pakistan—also score above 90 percent in the Vulnerability Model, which measures systemic, individual, and environmental risk factors in 167 countries. The interplay between modern slavery and risk factors is discussed further below.

Despite a change in methodology, Mauritania and Cambodia remained in the top 10 in 2018. Mauritania continues to host a high proportion of people living

in modern slavery. The national survey confirmed the existence of forced marriage and forced labour. Forced labour was found to occur in different sectors, to both males and females across different age groups and geographic regions. The practice is entrenched in Mauritanian society with slave status being inherited, and deeply rooted in social castes and the wider social system. Those owned by masters often have no freedom to own land, cannot claim dowries from their marriages nor inherit property or possessions from their families.<sup>25</sup> Despite improvements to legislation in 2015, which strengthens the provisions on slavery, allows third parties to bring cases on behalf of slavery victims, and establishes special tribunals to investigate slavery crimes,<sup>26</sup> progress in Mauritania remains slow. There are reports that police and the judiciary are reluctant to implement the new legislation and that several cases of slavery have been reclassified as lesser crimes, although the ILO Committee of Experts notes some positive steps in recent times.<sup>27</sup> In Cambodia, men, women, and children are known to be exploited in various forms of modern slavery - including forced labour, debt bondage and forced marriage. While the prevalence of forced sexual exploitation and forced begging in the country has been reported previously, the national survey also pointed to forced labour in manufacturing, farming, construction and domestic work. In Cambodia, the government has been slow to improve their response to modern slavery.

#### FIGURE 1

Estimated prevalence of modern slavery by country (noting 10 countries with highest prevalence, estimated victims per 1,000 population)



#### Key trends

Three main trends emerge from the Global Slavery Index national estimates of modern slavery.

#### First:

Many of the countries with the highest estimated levels of prevalence are marked by conflict - Eritrea, Burundi, Central African Republic, Afghanistan, South Sudan, and Pakistan all appear among the 10 countries with highest prevalence. The role that conflict plays in compounding vulnerability to slavery is widely recognised and finds support in an assessment of vulnerability at the national level. In the Walk Free Foundation's assessment of vulnerability across five dimensions – governance issues, lack of basic needs, inequality, disenfranchised groups, and effects of conflict - countries with high vulnerability due to effects of conflict generally have higher vulnerability scores across the remaining four dimensions. This is not surprising given the disruption to, and often complete dismantling of, the rule of law, as well as damage to critical infrastructure and limited access to education, health care, and food and water as a result of conflict. Similarly, the Walk Free Foundation's government response data highlight the disruption caused by conflict to government functions. Eritrea, Central African Republic, Pakistan, and Iran all score lowly on government responses, while Afghanistan and South Sudan were excluded from the government response assessment this year due to significant ongoing conflict.

#### Second:

The improved measurement of state-imposed forced labour reveals the substantial impact this form of slavery has on populations. The three countries with highest prevalence in the Global Slavery Index - North Korea, Eritrea, and Burundi – stand out as having a very high prevalence of state-imposed forced labour. State-imposed forced labour includes citizens recruited by their state authorities to participate in agriculture or construction work for purposes of economic development, young military conscripts forced to perform work that is not of military nature, those forced to perform communal services that were not decided upon at the community level and do not benefit them, or prisoners forced to work against their will.<sup>28</sup> In North Korea, one in 10 people are in modern slavery with the vast majority being forced to work by the state. See Spotlight on North Korea at p.34 for further analysis on this country.

Governments that regularly impose forced labour on their citizens perform poorly across other measures of vulnerability. For example, they tend to be more autocratic, are believed to have lower quality policy and regulations, perform below the global average in ensuring access to necessities such as food and water and health care, and typically do not protect the rights of highly discriminated groups in the broader population. More specifically, the presence of state-imposed forced labour undermines at best, and at worst renders meaningless, any government response to modern slavery. North Korea has the weakest response to modern slavery globally due to the state's role in forced labour both within North Korea and of North Koreans abroad. The abuse of civic duties in Burundi and conscription in Eritrea also threatens any concrete actions these governments may be taking.

#### Third:

The prevalence of modern slavery in highly developed, high income countries is higher than previously understood. This learning reflects improvements in the methodology, in particular, the ability to systematically count cases at the point of exploitation which was made possible with a substantially larger number of surveys. For example, if an Indian man reported being exploited in the construction sector in the United Arab Emirates (UAE), that case was attributed to the UAE. In the five-year reference period for the estimates, while surveys were conducted in 48 countries, men, women, and children were reported to have been exploited in 79 countries. This results in higher estimates in countries such as the United States, Australia, United Kingdom, Germany, France, the Netherlands, and several other European nations.

While these findings emphasise the responsibility of highly developed countries to act, the estimates reveal only part of the picture. It is important to note that the governments in several of these countries – the Netherlands, the United Kingdom, the United States, Sweden, Belgium, Croatia, Spain, Norway, Portugal, and Montenegro – are also taking the most action to respond to modern slavery.

These countries also tend to have lower vulnerability scores across all measures, which reflects effective governance across a broad range of areas and, in particular, a strong capacity to provide protections for vulnerable subgroups and ensure access to necessities such as food and water. Collectively, these factors mitigate risks of enslavement for citizens. However, increased prevalence of modern slavery among these countries suggests that critical gaps remain around the implementation of existing legislation

and policies and in tackling the root causes of exploitation. It is very likely that this reflects the reality that, even in countries with seemingly strong systems, there are gaps in protections, with certain groups such as irregular migrants, the homeless, or minorities subject to intense and widespread discrimination and typically less able to access protection. In Europe, which has had a very strong response to modern slavery, there has been a tightening

of migration policy and a reduction in the protections available to migrants in recent years. While in part this is a response to the current refugee and migrant crisis, this also renders these individuals more vulnerable to modern slavery. Similar approaches have also been adopted in the US and Australia.

On the other hand, when our assessment of government responses is correlated against GDP (PPP) per capita, we find that some high-income countries have taken limited

high

low

action to respond to modern slavery. Countries including Qatar, Singapore, Saudi Arabia, and the UAE have taken limited action despite high levels of resources (see Figure 4, p.43). These countries tend to perform relatively well in comparison with other countries in the region on overall vulnerability scores given their greater capacity to address areas of critical need for citizens. However, there remain gaps in protections for migrant populations, often the most vulnerable groups to modern slavery in

these countries. Even a seemingly strong response is undermined where there are subgroups of people who suffer high levels of discrimination, as they are likely to be "left behind" where responses to slavery are concerned. This can be linked to a lack of legal status in a country, for example, women in Saudi Arabia, domestic workers who fall outside the protection of labour laws in most Gulf countries, or the stateless hill tribes of Thailand and the Rohingya

people of Myanmar, the latter of whom are at the center of the world's fastest growing refugee crisis.<sup>29</sup>

The 10 countries with the largest estimated absolute numbers of people in modern slavery include some of the world's most populous. 30 Collectively, these 10 countries – India, China, Pakistan, North Korea, Nigeria, Iran, Indonesia, Democratic Republic of the Congo, Russia, and the Philippines – account for 60 percent of people living in modern slavery and over half the world's population.

FIGURE 2
Vulnerability to modern slavery by country (noting 10 countries with highest average vulnerability score)

Countries including

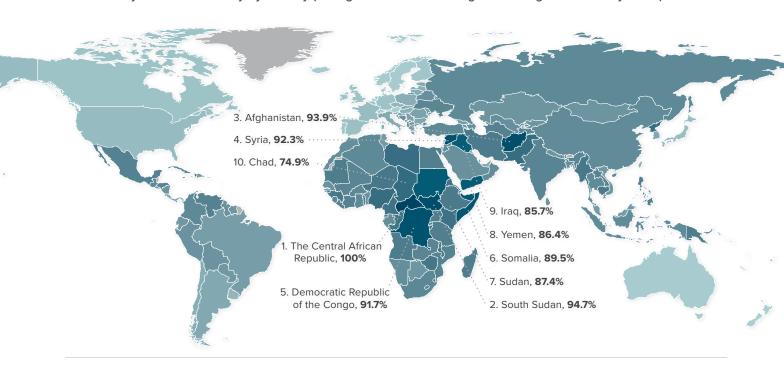
Qatar, Singapore,

Saudi Arabia, and the

UAE have taken limited

action despite high levels

of resources.



Rank. Country name, Vulnerability percentage

# Comparability of the prevalence estimates to the previous Global Slavery Index

Due to substantial differences in scope, methodologies, and expanded data sources, prevalence estimates in the 2018 Global Slavery Index are not directly comparable to the previous edition. Since 2014, nationally representative household surveys have formed the core element of the Walk Free Foundation's approach to measuring modern

slavery. In 2016, our estimates were based on results of surveys in 25 countries through the Gallup World Poll,<sup>32</sup> the results of which were extrapolated to countries with an equivalent risk profile. Although this represented the best data available at the time, measurements of forced sexual exploitation and children in modern slavery were identified as critical data gaps to address in future estimations.

In 2017, these gaps were addressed by adopting a combined methodological approach when developing the Global Estimates of Modern Slavery with the ILO

and the IOM. This involved drawing on three sources of data: (1) The existing survey program was expanded to cover 48 surveys in 54 countries. To date, more than 71,000 people have been interviewed and the countries surveyed represent over half of the world's population. It is the most extensive survey program on modern slavery

ever undertaken and forms the central component of the Global Estimates of Modern Slavery.<sup>33</sup> (2) Administrative data from IOM's databases of assisted victims of trafficking. And (3) data derived from validated secondary sources and a systematic review of comments from the ILO supervisory bodies regarding ILO Conventions on forced labour. The

Global Slavery Index 2018 uses the same data sources and regional and global estimates as its starting point.

As an example of the impact of changes in methodology on the comparability between the previous and current prevalence estimates, the 2016 Index estimated that around 18.3 million people were in modern slavery in India, whereas the 2018 Index estimates that there are around 8 million people living in modern slavery. This difference reflects the presentation of the number who experienced modern slavery on any given day in 2016 (a "stock" figure)

as opposed to the number of people in slavery over a five year period (a "flow" figure), as was presented in 2016. The present estimates also reflect the addition of forced sexual exploitation and children in modern slavery. For a fuller list of the changes to the methodology, refer to Appendix 2: Part B.

Due to substantial differences in scope, methodologies, and expanded data sources, prevalence estimates in the 2018 Global Slavery Index are not directly comparable to the previous edition.

Haifa, a 36-year-old woman from Iraq's Yazidi community who was taken as a sex slave by Islamic State group fighters, stands on a street during an interview with AFP journalists in the northern Iraqi city of Dohuk on November 17, 2016. Haifa and her family were among thousands of members of the Yazidi minority shown no mercy by IS when it swept through areas north and west of the Iraqi capital in 2014. Men were gunned down and thousands of women, including Haifa and her younger sister, were taken as sex slaves.

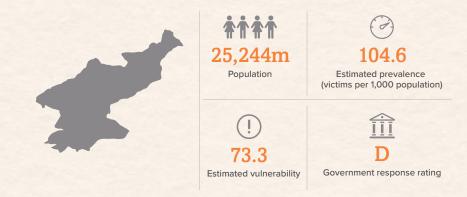


#### **DATA LIMITATIONS**

While regional estimates were presented in the Global Estimates of Modern Slavery, critical gaps in available data were noted. These are particularly problematic in the Arab States, where only two national surveys were undertaken, none of which were in the Gulf Cooperation Council (GCC) countries, despite the incidence of forced labour reported there by various sources in such sectors as domestic work and construction. Further, measurement of forced marriage among residents of countries within the region is almost impossible where there are no surveys at all. Taken together, these gaps point to a significant underestimate of the extent of modern slavery in this region.

Similarly, it is typically not possible to survey in countries that are experiencing profound and current conflict, such as Syria, Iraq, Yemen, Libya, South Sudan, and parts of Nigeria and Pakistan. Yet it is known that conflict is a significant risk factor for modern slavery – the breakdown of the rule of law, the loss of social supports, and the disruption that occurs with conflict all increase risk of both forced labour and forced marriage. The lack of data from countries experiencing conflict means that modern slavery estimates in regions in which conflict countries are situated will understate the problem. While drawing on vulnerability data goes some way towards mitigating the impact of this gap, the need for better data in conflict countries remains an urgent research priority.

#### SPOTLIGHT FORCED LABOUR IN NORTH KOREA



In 2017, the Walk Free Foundation partnered with researchers at the Leiden Asia Centre and the Database Center for North Korean Human Rights (NKDB) in an effort to learn more about the hidden reality regarding forced labour and other forms of modern slavery inside North Korea. As it is not possible to directly survey or otherwise collect data within North Korea, the research involved undertaking interviews with 50 defectors from North Korea who are living in South Korea.

Of the 50 people interviewed, all but one <sup>35</sup> described situations they had been subjected to while living in North Korea that meet the international legal definition of "forced labour." In this sample, three key typologies of modern slavery emerged. First, repeated mobilisation by the government of children, and later adults, through mandatory, unpaid "communal labour" in agriculture, road building, and construction.

- » For children, this might involve daily work in agriculture, or a month of work at harvest time. The schools, and not the children, received payment for the work. If children did not participate, they would later be punished and criticised within the school itself. Participation could be avoided through paying bribes.
- For adults, communal labour involved being mobilised for "battles" in which workers are sent to work for 70 or 100 days in a row. The penalty for refusal is a cut in food rations or the assessment of taxes.

For children, the forced mobilisation started at an early age and ranged from light agricultural duties to longer periods of hard labour, all of which was without pay:

When I was a teenager in the Youth League, I had to participate in the speed battles as part of the shock brigade at least once. I was mobilised to do construction on the Pyongyang Highway for six months.

Respondent No. 7, female, adult

Disguising his identity, a 20 year old refugee from North Korea now living in Northern China agreed to be photographed on the condition that his face and location were not recognizable. He reports that he left his mother and sister behind in North Korea. He used to be a road worker but was constantly hungry (North Korea uses selective food allocation as a tool of control). In China he works as a farm labourer and construction worker. If he is lucky, he makes about 40 Euros per month. However, he says his boss often does not pay him. Also, locals, who know about his illegal status and that he cannot seek help, beat him.

Photo credit: Katharina Hesse



66 From the age of 13, every student is mobilised for farm work without exception. It lasts 40 days for the spring mobilisation and 30 days for the autumn one.

Respondent No. 10, male, adult

One adult male respondent described his experience with mobilisation as follows:

You cannot refuse. If the work unit leader orders you to go to work, you have to do it. If you don't, then your food rations are cut off.
Respondent No. 1, male, adult

The second typology was forced labour of the general population by the state. Almost all respondents in this sample indicated they had either not been paid for their work other than through provision of rations (which themselves can be refused or withheld as punishment) or, if they had been theoretically paid, wages were in fact withheld due to official donation drives and other deductions. As some workplaces exist but have no actual production, workers reported having to procure on their own the goods their workplaces are supposed to be producing so that the employer could show some output. Others paid fees to be registered as employees (to avoid being classified as unemployed and thereby risk being sent to a labour camp) but actually worked elsewhere (the so-called "8/3 workers" 36). To survive and cover the cost of holding their jobs, they would trade or otherwise sell their labour on the black market. All but one 37 respondent noted that it was impossible to refuse or leave a job without permission, and any attempt to do this would result initially in loss of rations and then internment in a labour camp.

Respondents gave examples of some of the absurd situations they found themselves in as a result of both having to pay to work and pay to prop up the broken system:

66 On paper I was a labourer but in reality I did not work as one. It was a place that raised pigs to support the People's Army and shock brigades. It was supposed to raise pigs. But no one actually raised pigs there. There was no space to raise pigs there and no feed for them either. Since the labourers cannot work, they are required to pay a certain amount of money instead. Every month the labourers must give 2kg of pork to the management office.

Respondent No. 23, female, adult

Compliance was backed up by the need to be employed, at risk of being sent to a labour camp. Respondents noted for example:

66 If you quit without receiving approval, you will be detained at a labour training camp.

Respondent No. 30, male, adult

66 If I'd quit, I would be caught. And if I didn't go to work for more than two months and was caught as unemployed, I would be investigated by the police office and would be detained in a labour training camp. Usually, the period of detainment was six months.

Respondent No. 38, male, adult

66 I couldn't quit my job. If I didn't go to work, I would be sent to a labour training camp.

Respondent No. 44, male, adult

Finally, respondents also described forced labour inside labour camps. One respondent noted the following experience:

I had done this kind of work, but because it was done in the labour camp and I did not have any freedom, that was the difficult part. It was difficult to work under surveillance. [...] I couldn't use the toilet whenever I wanted, I had to ask for permission before using it. [...] I got up at six in the morning and went to bed at ten in the evening. In the morning, I got up and cleaned the yard, then washed my face. They lined us up in the morning. The line-up officer talked with the head of the camp and distributed our work tasks.

Respondent No. 8, female, adult

The sample for this research included two defectors who had worked both inside North Korea and for the North Korean government overseas. Both explained that their wages were withheld and, at most, some portion was paid to them (after three years, one received the equivalent of \$55 for each month he worked; the second worked for three years to earn sufficient funds to live in North Korea for about three months). While being physically located overseas, they described their workplaces as exported North Korean environments in which the hierarchical structures and ideological sessions travelled with them.

While the study did not seek to examine the situation of North Korean women who have been forced to marry in China, one respondent (a member of the Workers Party of Korea with a well-positioned job in North Korea) did share the following experience that is relevant to understanding the complexities of this issue:

46 I didn't come to [South] Korea because I wanted to. I sent one person across the border. She was with her friend. She directly came to Korea but the broker sold her friend to a farm owner (in China) who was 20 years older than her. So she often pleaded to the broker to send her to South Korea and paid him for that. But all nine people who set out were caught in China and were repatriated back to North Korea. They mentioned my name when they were investigated about their escape route and helpers at Cheongjin police holding camp. After this, I had no choice but to leave North Korea so I left in a hurry. It was unimaginable that the arrested woman wouldn't divulge my name during the interrogation process and torture at the police holding camp, so I left right away. They put most serious responsibility and penalty for assisting people with their escape to South Korea. So there was much possibility that I could have been buried alive so I left.

Respondent No. 27, male, adult

To understand the experiences of these 50 men and women, it is necessary to understand the operating environment inside North Korea. Following the famine in the late 1990s and the collapse of the Public Distribution System for all but a minority of citizens, North Korean daily life has become a contradictory mix of socialist rhetoric (in which the Supreme Leader and the state provide for its people) and market-based realities (in which the general population supports and funds the Supreme Leader and the State). As noted in interviews, key features that impact on degrees of freedom in working life inside North Korea include the following:

- » All officially recognised work is centrally organised.
- » Social class determines the nature of the employment you receive (along with your housing, access to education, and other benefits). There are three main classes: the core class (the elite, party cadres, and their families), the wavering class (average North Koreans), and lastly the hostile class (including descendants of landlords or capitalists). Status can be and is inherited.
- » The punishment for being unemployed or failing to attend work is internment in a labour camp.
- Workers are provided with rations for food and other necessities of life, which can also be withheld as punishment.
- While in theory all work involves a salary, in reality most wages remain unpaid. Respondents noted many cases where they had to in fact pay both to keep their job (to avoid being formally unemployed and then sent to a labour camp) and to cover the costs of production (when quotas or were not met or the workplace actually had no materials or production). To maintain their "employment" and to survive, they reported working on the black market, trading or selling whatever they could.
- » Obtaining a job, keeping it, or switching jobs normally involves payment of bribes to officials.

As one defector explained that, while forced mobilisation is compulsory, it is equally possible to avoid mobilisation through bribery:

66 There is a certain mobilisation campaign that people should work for three years. There is mobilisation to Mt. Baekdu for making grass fields. People from the government would come to a certain region and mobilise residents for joint work for a large-scale construction project such as paving highways. I did not participate in such mobilisation. I paid money instead. I paid 50 North Korean won in 2008. Why should I work when I have money? Working there is extremely hard and people escape from there.
Respondent No. 39, male, adult

The picture that emerges is as disturbing as it is unique. While gaining access to a wider sample of workers across North Korea itself is simply not possible, there is no reason to doubt that the first-hand experiences related this group reflect the brutal reality of modern slavery perpetrated by the state. They also described a broader system that they saw operating around them that not only involves state-sponsored forced labour, but also depends on these practices for its very survival.

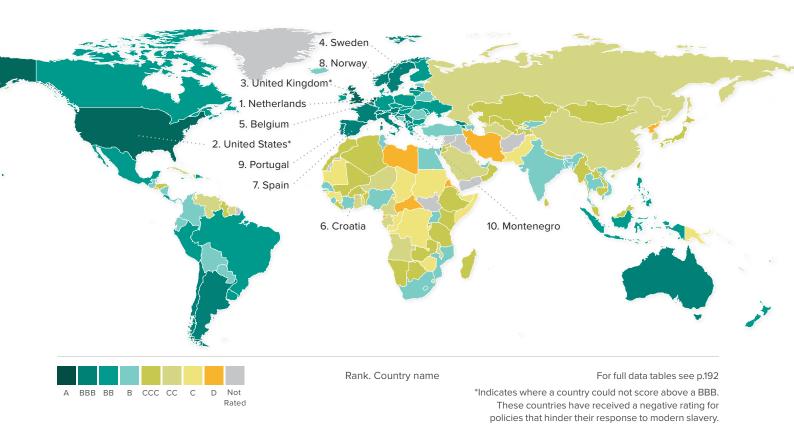
This spotlight summarises a longer set of findings that can be found in the report *Pervasive*, *Punitive*, and *Predetermined*: *Understanding Modern Slavery in North Korea*.

Kim Jeong-Ya (a pseudonym), 67, who lives near the North Korean border in Yanji, China, belongs to a handful of Chinese activists who have dedicated their lives to helping North Koreans make a safe passage from North Korea to South Korea via mainland China. Kim has been imprisoned twice and beaten up by North Korean agents operating in China. Kim's relatives, who did the same kind of support work "disappeared" in North Korea. Since her release from jail, Kim has been under intense police surveillance. Her meager life savings were confiscated by local authorities, and she is not allowed to leave her home in the suburbs of Yanji.



# What are governments doing to address modern slavery?

FIGURE 3
Government response rating to modern slavery by country (noting 10 countries with highest government response)



Globally, governments have taken important strides in the fight against modern slavery since the publication of the 2016 Global Slavery Index. Overall, the Government Response Index suggests that national legal, policy, and programmatic responses to modern slavery are improving,

with an increasing number of countries with a BBB and BB rating in 2018 over 2016, and fewer CCC and CC ratings. However, there are some responses that appear to be going backwards, with a small increase in the number of countries that were rated C or D in 2018 compared to 2016.

In 2018, 122 countries have criminalised human trafficking in line with the UN Trafficking Protocol,<sup>38</sup> while only 38 countries have criminalised forced marriage. There are now 154 countries

that provide services for victims, compared to 150 in 2016, although important gaps remain. Eighty-two countries report gaps in the provision of services to either migrants, men, and children, or a combination of these. More countries are now coordinating their responses, with a three percent increase in the number of countries implementing National Action Plans covering some, if not all, aspects of a modern

slavery response.<sup>39</sup> One of the more striking findings in 2018 is the growing government engagement with business and the increasing political interest in the investigation of government procurement, with 36 countries taking steps to investigate forced labour in private or public supply chains.

This is a significant increase from the four governments identified in 2016.

This year, we have for the first time included data on all 53 Commonwealth countries in our government response database,<sup>40</sup> bringing the total number of countries included in our assessment to 181.<sup>41</sup> As data for the smaller island nations of the Commonwealth are limited, we have not provided an overall rating for these individual countries. However, taking these countries into account in our global analysis of key indicators does reveal

an encouraging narrative: when including all Commonwealth countries, the number of countries criminalising human trafficking increases to 135, with 164 countries providing services to victims of modern slavery. Due to the ongoing conflict and extreme disruption to government, we have not included ratings for Afghanistan, Iraq, South Sudan, Syria, and Yemen this edition.<sup>42</sup>

Overall, the Government
Response Index
suggests that national
legal, policy, and
programmatic responses
to modern slavery
are improving.

In 2018, the governments taking the most action to respond to modern slavery are:

1/ The Netherlands 6/ Croatia
2/ United States 7/ Spain
3/ United Kingdom 8/ Norway
4/ Sweden 9/ Portugal
5/ Belgium 10 / Montenegro

These countries are characterised by strong political will, high levels of resources, and a strong civil society that holds these governments to account for their actions to respond to modern slavery. These results are similar to 2016, but with some slight shifts in the positioning of Australia downwards as Belgium moves upwards. While the positive conclusion of the Australian inquiry into an Australian Modern Slavery Act is to be commended, we strongly encourage the government to pass legislation that incorporates an Independent Commissioner. On the other hand, we welcome the issuance of public procurement guidelines in 2017 in Belgium which incorporate suggestions on how to implement ILO Conventions, including the abolition

of forced labour<sup>43</sup> and the pilot initiative looking at the application of ILO standards in the personal protective equipment sector in Ghent.<sup>44</sup>

It is not just governments at the top of the table that are taking positive action to respond to modern slavery. Other countries are taking notable action, as well. Morocco<sup>45</sup> and Côte d'Ivoire<sup>46</sup> passed comprehensive trafficking legislation in 2016, which has resulted in improved ratings

from CC to CCC and from CCC to B respectively. Chile has improved its victim protection mechanisms by launching the Blue Campaign, a website to help improve identification of victims<sup>47</sup>, establishing guidelines<sup>48</sup> to help first responders identify and refer victims, and supporting the implementation of the National Referral Mechanism.<sup>49</sup> As a result, Chile has moved from a B to BBB rating.

As with the 2016 findings, when correlated against GDP (PPP) per capita, some countries stand out as taking relatively strong action when compared with those that have stronger economies. Countries including Georgia, Moldova, Senegal, Sierra Leone and Mozambique are taking positive steps to respond to this issue relative to their wealth. Sierra Leone's coordination body, the Inter-Agency Human Trafficking Task Force, resumed activities in 2015 and approved the 2015-2020 National Action Plan. In Georgia, the government adopted a victim-centred approach by establishing victim witness coordinators from the initial stages of investigations through the end of court proceedings.

Since the 2016 Index, more countries have proactively implemented reporting requirements for businesses to detail actions taken to investigate their supply chains for labour violations, including forced labour. Twenty-seven EU member states, have fully transposed the EU non-financial

reporting Directive (Directive 2014/95/EU) into domestic legislation.<sup>50</sup> The Directive requires large companies to disclose certain information on the way they operate and manage social and environment challenges. Although not specific to forced labour, the Directive offers an opportunity for more businesses to demonstrate action taken to combat forced labour beyond those already reporting under the UK government's Modern Slavery Act. The first non-financial statements will be included in businesses' annual reports from 2018 onward.

Governments are beginning to recognise that public procurement is also at high risk of modern slavery. The United States leads the way with Executive Orders 13627 (2012) and 13126 (1999), which require mandatory reporting and due diligence from all federal government contractors and subcontractors. <sup>51</sup> Guidelines and training on forced labour are provided to all government procurement officials, while the closure of a loophole in the 1930 Tariff Act (19 U.S.C. § 1307) has meant that goods are regularly seized and inspected if they are believed to be produced with forced or child labour. <sup>52</sup> In Europe, Article 57 of Directive 2014/24/EU

allows for the exclusion of contractors from public procurement where there has been a conviction of human trafficking or child labour.<sup>53</sup> At the time of writing, these have been transposed into domestic legislation of all European countries apart from Luxembourg and Austria.<sup>54</sup> Interestingly, there is also evidence that the Chinese government has investigated incidents where subcontractors in government contracts have failed to pay wages<sup>55</sup> and

the Paraguayan National Secretariat for Children and Adolescents has an inter-institutional agreement with the National Bureau for Public Contracts to ensure that any goods or services procured by the government are not produced through child labour. Across Organisation for Economic Co-operation and Development (OECD) countries, general government procurement spending equalled nearly 12 percent of GDP in 2015. <sup>56</sup> Tackling government supply chains to reduce instances of forced labour therefore has enormous potential to reduce the number of people in modern slavery.

Governments are increasingly collaborating with businesses to eradicate modern slavery. In 2017, the Bali Process launched the Bali Process Business and Government Forum (BPGBF), which is a subsidiary body to the existing intergovernmental Bali Process. <sup>57</sup> The BPGBF is a cooperative initiative to combat modern slavery and human trafficking in the Indo-Pacific region. The Forum brings together government representatives from 45 countries, three United Nations organisations, and the private sector. The initial meeting provided a unique opportunity for information sharing and implementing partnerships with the joint goal of ending modern slavery.

Looking ahead, the Forum is expected to have the joint outcome of promoting good business practices across the

Georgia, Moldova, Senegal, Sierra Leone and Mozambique are taking positive steps to respond to this issue relative to their wealth. private sector while also encouraging legislative changes by government.

Countries have taken steps to strengthen criminal justice responses to modern slavery. As of 15th June 2018, the 2014 Forced Labour Protocol is in force in 17 countries, with an additional seven ratifications coming into force in the next 12 months. $^{58}$  This is important as the Forced Labour Protocol brings the framework created by the 1930 Convention on Forced Labour into the 21st century. The Indian government has taken recent action to reduce the worst forms of child labour by ratifying the ILO Convention 182 on the Worst Forms of Child Labour. In line with the Optional Protocols to the Convention on the Rights of the Child, 56 countries have criminalised the buying and selling of children for sex or sexual services, and 27 have criminalised the use of children in armed conflict. Despite these promising steps, in 64 countries penalties for modern slavery crimes remain disproportionate to their severity, as perpetrators can be penalised with a relatively small fine or conversely penalised with corporal punishment (itself a breach of international human rights standards).

The existence of legislation is not in itself enough to deter modern slavery crimes and in many cases the lack

of effective implementation of legislation indicates a significant gap in a government response. While 145 countries have provided at least one training session since 2012 for their front-line police officers on identification of victims and investigation of modern slavery crimes, 11 of these did not subsequently identify any victims, suggesting poor execution or low quality

of the training provided. Fewer countries have provided training to judges and prosecutors, with 108 and 109 governments respectively providing training for these groups since 2012. Regular training was provided to judges and prosecutors in South Africa, Bolivia, Jordan, and Serbia, among others, however there are reports that this has not resulted in the most stringent of sentences for identified traffickers and exploiters, with some evidence of suspended sentences or conviction for lesser crimes.

Access to justice and protection for identified victims has improved in some countries. For example, despite an overall poor response in Hong Kong, children and vulnerable witnesses may now give testimony via video conference.<sup>59</sup> In Indonesia, the government has opened a child-friendly integrated public space in East Jakarta where child and adult victims of trafficking can report trafficking crimes to trained counsellors.60 Fifty-eight countries have a National Referral Mechanism for victims of modern slavery. In Albania, the establishment of a National Referral Mechanism has been supplemented by Standard Operating Procedures, that are used by regulatory and non-regulatory bodies that may come into contact with victims, including those covering teachers, doctors, and people working in the tourism sector.<sup>61</sup> Since 2016, 118 governments have provided funding to shelters or victim support services. Longer-term reintegration services are less frequent, with 97 governments offering measures for foreign

victims to remain within the country and 71 governments providing longer term support. Of those 97 countries, only 37 governments offered visas on humanitarian or other grounds not tied to participation in a court case.

While many positive actions were taken by governments around the world in 2018, those taking the least action to combat modern slavery are:

162 / North Korea 157 / Equatorial Guinea

161 / Libya 156 / Burundi 160 / Eritrea 155 / Congo 159 / Central African Republic 154 / Sudan 153 / Mauritania 158 / Iran

Those countries with weaker responses to modern slavery are characterised by government complicity (as is the case in North Korea), low levels of political will (as is the case in Iran), fewer available resources (as is the case in Equatorial Guinea), or high levels of conflict (as is the case in Libya).

These results are broadly similar to our 2016 assessment, with some small improvements in Papua New Guinea, Guinea, Democratic Republic of the Congo, and Hong Kong. Following the launch of the 2016 Global Slavery Index, the Hong Kong government began to take some steps to

> recognise that modern slavery is a problem by training front-line police and establishing a specialised police force. The fact that the government is starting to respond is to be commended, however, more remains to be done, including criminalising of modern slavery offences and providing those exploited within Hong Kong with alternative options to deportation.

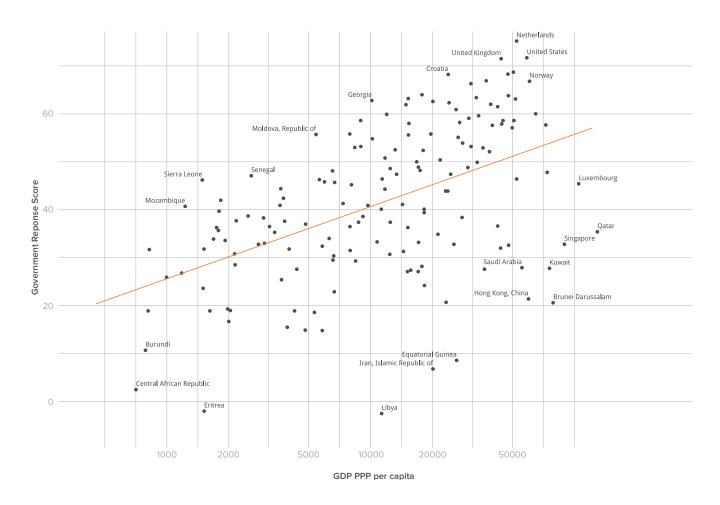
Governments are increasingly collaborating with businesses to eradicate modern slavery Responses in certain countries have worsened since 2016.

Protection measures for identified victims of modern slavery in Pakistan are limited, with evidence that victims are detained in prison-like shelters where traffickers are able to enter and force inmates into prostitution. 62 Services for men, including victims of bonded labour, are also lacking. Progress remains slow in Mauritania despite improvements in 2015 to legislation, such as allowing third parties to bring cases on behalf of slavery victims and establishing special tribunals to investigate slavery crimes. 63 There are reports that police and the judiciary are reluctant to implement the new legislation and that several cases of slavery have been reclassified as lesser crimes.<sup>64</sup> In Nepal, the government lessened protections for refugees, a cohort highly vulnerable to abuse and exploitation. In Nepal, refugees from Pakistan, Myanmar, Afghanistan, and Sri Lanka, among others, are required to pay prohibitive fines of up to US\$5 a day and a penalty of US\$500 to obtain an exit permit. These refugees also lacked legal access to education and the right to work.65

Despite these countries taking fewer actions due to limited resources or ongoing conflict, there are wealthier, more stable countries that have taken little relative action when it comes to combatting modern slavery; when correlated against GDP (PPP) per capita Qatar, Singapore, Kuwait, Brunei, Hong Kong, and Saudi Arabia stand out as countries

FIGURE 4

Correlation between GDP (PPP) per capita and Government Responses Index



taking relatively limited action despite the size of the problem and resources at their disposal (Figure 4).

Corruption continues to be a serious impediment to any

effective response to modern slavery. Almost every country in the Global Slavery Index has criminalised corruption, including bribery of officials, however around 68 countries have conducted limited, if any, investigations into alleged cases of government complicity in modern slavery cases. This ranges from alleged complicity of police and border officials in Madagascar<sup>66</sup> in trafficking of Malagasy citizens overseas through to the alleged complicity of high ranking government officials in El Salvador in child sex trafficking cases.<sup>67</sup> Diplomatic officials from the Philippines, Bangladesh, Benin, Saudi Arabia, and Eritrea are also alleged to have been complicit in modern slavery cases.

In 2017, the Global Estimates of Modern Slavery produced the first robust measure and typology of state-imposed forced labour. For the Global Slavery Index 2018, we have updated our assessment of state-imposed forced labour to identify those governments that meet these criteria<sup>68</sup> by using ILO Committee of Experts comments and observations in combination with recent reports of exploitation at the hands of the government. As a result, 20 countries in 2016 and 2017 showed evidence of forcing their population or sub-populations to work under threat of

menace or penalty. This includes concerning allegations of forced labour in privatelyrun administrative detention centres in the United States<sup>69</sup> and Belarus<sup>70</sup> and compulsory prison labour in public and private prisons in Russia.71 In Vietnam72 and China73 we found evidence of forced labour in drug rehabilitation centres where inmates are forced to work as part of their recuperation. In Belarus, we found abuse of civic duties in the practice of Subbotniks, which requires government employees to work weekends and donate their earnings to finance government projects under the intimidation or threat of fines by state employers.74 Abuse of civic duties also occurs in Burundi,<sup>75</sup> Myanmar,<sup>76</sup> Rwanda,<sup>77</sup> and

in Swaziland, where there is evidence of the continuing practice of *Kuhlehla*, under which the community is forced to render services or work for the King or local chief.<sup>78</sup> Forced labour for economic development occurs in Uzbekistan and Turkmenistan, where the practice of forcing parts of

When correlated against GDP (PPP) per capita Qatar, Singapore, Kuwait, Brunei, Hong Kong, and Saudi Arabia stand out as countries taking relatively limited action despite the size of the problem and resources at their disposal.

the population to work in the annual cotton harvest is well documented. In Venezuela, Resolution No. 9855 of 19 July 2016 establishes a system of transition labour that is compulsory for all work entities, public and private. The resolution allows the government to transfer workers to entities in the agro-food sector, which requires additional support to increase production. These entities are also able to request additional workers, thus creating a system of forced recruitment to reinforce agro-food production to ensure food security. As noted, there is strong evidence, including recent interviews with defectors undertaken for research by the Walk Free Foundation, of the prevalence of forced labour imposed by the North Korean state.

Abuse of conscription becomes state-imposed forced labour in cases where conscripts are forced to perform work of a non-military nature. We find evidence of this in Colombia,<sup>81</sup> Egypt,<sup>82</sup> Madagascar,<sup>83</sup> Mongolia,<sup>84</sup>and

Mali<sup>85</sup> and perhaps most significantly in Eritrea. Under the pretext of "defending the integrity of the state and ensuring its self-sufficiency," the Eritrean government has developed a system of national service in which conscripts are exploited and forced to labour for indefinite periods of time. These forced labourers are required to build infrastructure and work in other projects for economic development that help to prop up the Eritrean government. Also, in 2016 there were wide reports of slave markets in Libya, where migrant men, women, and children are sold off to the highest bidder. Alongside this, there are reports of state involvement from the Libyan Coast Guard and the Department for Combating Irregular Migration forcing people who are in migrant detention into forced labour.

Teenage girls pictured in the dormitory for unaccompanied minors in Shagarab camp, eastern Sudan. Tens of thousands of Eritreans live in the area after escaping oppression and mandatory military service that acts as a cover for forced labour at home.

Photo credit: Sally Hayden/SOPA Images/LightRocket via Getty Images



A full description of the ratings is presented in Appendix 2: Part C.

TABLE 1
Government response rating by country (countries listed in order from highest to lowest within rating category)

Α	BBB	ВВ	В	ссс	сс	С	D
70 to 79.9	60 to 69.9	50 to 59.9	40 to 49.9	30 to 39.9	20 to 29.9	10 to 19.9	<0 to 9.9
Netherlands	United States* United Kingdom* Sweden Belgium Croatia Spain Norway Portugal Montenegro Australia Cyprus Macedonia, the former Yugoslav Republic of Austria Georgia Argentina Chile Italy Serbia France Latvia Switzerland	Albania Slovenia Lithuania Canada Jamaica Denmark Hungary Dominican Republic Finland Ireland New Zealand Germany Bulgaria Philippines Moldova, Republic of Brazil Greece Kosovo Poland Armenia Slovakia Ukraine Czech Republic Peru Mexico Israel Indonesia Uruguay Costa Rica	Trinidad and Tobago Thailand Estonia Bosnia and Herzegovina Azerbaijan Vietnam United Arab Emirates South Africa Turkey Senegal Ecuador Iceland Nicaragua Sierra Leone Nigeria India Luxembourg Guatemala Bangladesh Tunisia Romania Panama Côte d'Ivoire Uganda Bolivia, Plurinational State of Colombia Kyrgyzstan Paraguay Mozambique Belarus Egypt	Haiti Barbados Nepal Jordan Malaysia Lesotho Taiwan, China Benin Cambodia El Salvador Sri Lanka Honduras Japan Morocco Kenya Algeria Ethiopia Burkina Faso Qatar Djibouti Mauritius Lao People's Democratic Republic Gambia Rwanda Namibia Botswana Tajikistan Kazakhstan Singapore Tanzania, United Republic of Bahrain Myanmar Oman Madagascar Zambia Liberia Guyana Lebanon Mali Mongolia Uzbekistan	Angola Swaziland Timor-Leste Venezuela, Bolivarian Republic of Saudi Arabia Kuwait Korea, Republic of (South Korea) Ghana China Suriname Turkmenistan Malawi Niger Cameroon Gabon Togo Cape Verde Hong Kong Cuba Russia Brunei Darussalam	Guinea Zimbabwe Papua New Guinea Congo, Democratic Republic of the Guinea-Bissau Pakistan Chad Somalia Mauritania Sudan Congo Burundi	Equatorial Guinea Iran, Islamic Republic of Central African Republic Eritrea Libya Korea, Democratic People's Republic of (North Korea)

For full data tables see p.192

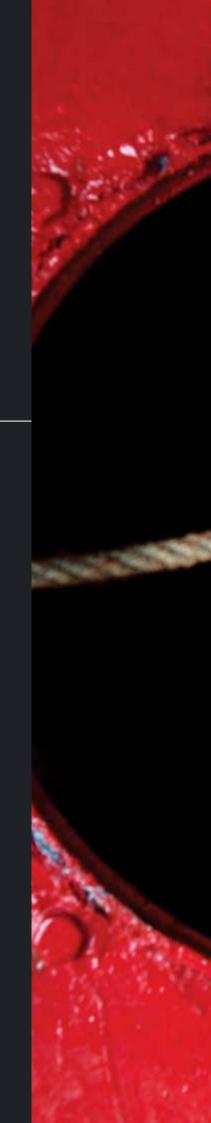
<sup>\*</sup>Indicates where a country could not score above a BBB. These countries have received a negative rating for policies that hinder their response to modern slavery.

# 04 SPOTLIGHT ON SECTORS

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Phuket, Thailand - A migrant from Myanmar working as a fisherman on a fishing boat in Phuket, Thailand. Thailand's fishing industry has been under constant scrutiny for allegations of forced labour on fishing boats.

Photo credit: Jonas Gratzer/LightRocket via Getty Images







Despite the recognition that modern slavery occurs in fishing industries in most parts of the world,¹ reliable estimates of the prevalence of modern slavery across the sector are few.² As in other industries where the use of forced labour has been uncovered, forced labour in fisheries is, largely, driven by the motivation to reduce costs in a relatively low-tech, labour-intensive, and low profit industry.

Fishers can be lured into situations of modern slavery by seemingly legitimate employment opportunities, but once recruited find themselves unable to leave because of the threat of violence towards themselves or family members, physical confinement on- and off-shore, the withholding of wages, and the debts they incur through the recruitment process.<sup>3</sup> Cases of modern slavery were reported in the product sector/source country either through NGO or media reports and these reports were based on eye witness accounts or interviews with victims are subjected to excessive working hours, unsafe working conditions, and inadequate food and water. The nature of offshore fishing, particularly for distant water fleets, can make escape from such situations impossible for months or years at a time.

The occurrence of labour exploitation and modern slavery in the fisheries of some countries are well documented. For example, reports of modern slavery in the Thai fishing industry have been amassed through investigative journalism and increasingly, qualitative and quantitative research. Such research has provided important insights into the entrenched nature and scale of the problem in Thailand's fishing industry and in its region. For instance,

a 2017 study by the Issara Institute and the International Justice Mission examining the experiences of Cambodian and Burmese fishers in Thailand between 2011 and 2016 found that 76 percent of migrant workers in the Thai fishing industry had been held in debt bondage and almost 38 percent had been trafficked into the Thai fishing industry in that time-frame. 4 Subsequent research confirms that despite increased awareness and efforts by the Thai government to address this issue, forced labour and debt bondage within fisheries are ongoing and widespread.<sup>5</sup> While equivalent research has not yet been undertaken in the fishing industries of other major fishing nations, it is apparent that modern slavery in commercial fisheries is not unique to Thailand. For example, there have been media reports of modern slavery and labour abuses aboard American,<sup>6</sup> British,<sup>7</sup> Chinese,<sup>8</sup> and Taiwanese<sup>9</sup> vessels in recent years.

The labour abuses seen in the fishing industry take place in a broader context that includes economic, social, and environmental factors. First, the increasing global demand for fish and the rapid growth of industrial fishing fleets, along with over-exploitation of many fish stocks, has resulted in a declining catch per effort and falling profitability.<sup>10</sup> This

has occurred alongside the destruction of small-scale, artisanal fisheries that previously provided fishing families and their villages with food and income. From a regulatory perspective, these results are inadvertently encouraged by government subsidies that seek to keep fishing industries operating where they would otherwise be unprofitable. All of this occurs within inadequate and inconsistent legal frameworks regulating fishing industries, and poor enforcement where such laws do exist.

# What are the risk factors for modern slavery in the fishing industry?

Together with researchers from the Sea Around Us, at the University of Western Australia and the University of British Columbia, the Walk Free Foundation sought to determine a set of risk factors that are associated with modern slavery in fisheries at a global level. In the absence of local reporting, these risk factors enable us to identify likely areas of national risk.

To understand risk factors, we brought together data on fisheries and fishing management, with data on prevalence of modern slavery. The analysis indicates that the occurrence of modern slavery in major fish producing countries is associated with the following six risk factors:

- 1/ Fishing outside of the vessel's national waters (officially known as Exclusive Economic Zones or EEZs) where activities may be subject to fewer regulations.
- 2/ A dependence on distant water fishing. Distant water fishing potentially increases the vulnerability of the crew to exploitation because of the remote fishing locations where vessels often remain for extended periods of time, limiting the ability for monitoring/ oversight by authorities.

- 3/ High levels of vessel and fuel subsidies provided by the national government. High subsidies indicate a lack of competitiveness in a country's fishing industry and suggest likely pressure to cut costs.
- 4 / Relatively low per capita GDP of the fishing country. This may reflect limited governmental capacity to monitor fleets and enforce fisheries standards and legislation and/or an increased likelihood that potential workers on fishing fleets are seeking work in an environment of limited economic opportunities.
- 5 / Low average value of a fishery's catch per fisher. Low productivity fisheries have a more pressing need to reduce labour costs, as these are one of the few remaining costs that are not externally fixed.
- 6 / Large scale unreported fishing by a country's fishing fleets. This represents weak fisheries governance and a lack of legal oversight. Illegal fishing, a major component of unreported fishing, causes billions of dollars in losses to economies around the world each year, and poorly managed fisheries are lawless markets.

These six characteristics reflect two major sets of drivers:

- National Fisheries Policy the first three variables identified above reflect a country's decision to build and, typically, subsidise distant water fishing fleets.
- Wealth and Institutional Capacity the last three variables identified in the analysis are indicative of a country's economic capacity to maintain decent working conditions and report on fishing activity.

Phuket, Thailand. A migrant worker unloading fish on the mainland in Phuket. It is not just men who work in the fishing industry, women and girls are involved in activities including sorting, peeling, and canning to produce the final product.

Photo credit: Jonas Gratzer/ LightRocket via Getty Images



# Risk of modern slavery and impact on supply chains

Based on the six risk factors, we considered the top 20 fishing countries, which combined provide over 80 percent of the world's fish catch.<sup>15</sup> Slavery in these nations' fisheries would thus profoundly impact the degree to which slavedependent seafood exists in the global supply chain. Our analysis identified China, Japan, Russia, Spain, South Korea, Taiwan, and Thailand as being at high risk of modern slavery in their respective fishing industries. These "high-risk" fishing activities are characterised by a high proportion of catch taken outside their own waters at a greater distance from home waters than average, by poor governance (high levels of unreported catch), and by higher than average levels of harmful fishing subsidies. Except for Spain, instances of serious labour abuses have been documented in the fishing industries of those countries identified or are strongly suspected as high-risk.<sup>16</sup> Combined, these seven countries generate 39 percent of the world's catch.

A second group of interest comprises the smaller developing countries with primarily domestic or geographically local fisheries. These include Chile, India, Indonesia, Malaysia,

Mexico, Morocco, Peru, the Philippines, and Vietnam. They tend to be countries that fish at home and have low levels of harmful subsidies but also have low value catches, low GDP and high levels of unreported catch. These characteristics, in some cases, make them vulnerable to having forced labour in their own national fishing industries and also to being a source for fishers who become victims of modern slavery aboard foreign-flagged vessels that fish in their waters. Combined, these nine countries generate 31 percent of the world's catch.

The third group identified through this analysis comprises countries considered to be at low risk of modern slavery in their national fisheries. Countries in this group include Denmark, Iceland, Norway, and the US and are characterised by low levels of unreported catch, high value catches, and high per capita GDP. Combined, these four countries generate 12 percent of the world's catch.

While country of origin is an indicator of risk, in reality, seafood sold to consumers is typically a mix of domestic and imported product and it can be difficult to distinguish between the two. Analysis of seafood imports to Europe and the US suggests that when imported and domestically caught fish are combined in local markets, the risk of purchasing seafood contaminated with modern slavery increases approximately 8.5 times, compared with domestically caught fish.<sup>17</sup>

FIGURE 1
Top 20 fishing countries categorised according to risk of modern slavery in their fishing industry<sup>18</sup>

HIGH RISK	MEDIUM RISK	LOW RISK
China	Chile	Iceland
Japan	India	Denmark
Russia	Indonesia	Norway
Spain	Malaysia	United States
Korea, Republic of	Mexico	
South Korea)	Morocco	
Taiwan, China	Peru	
Thailand	Philippines	
	Vietnam	

An irregular immigrant working as a fisherman on a fishing boat in Phuket, Thailand. Many migrants see little chance in Myanmar for a life of proper employment and so many make the choice to contact a broker that could help them get across the border illegally to work in Thailand as hotel staff or fishermen.

Photo credit: Jonas Gratzer/LightRocket via Getty Images

# Where else should we be looking for modern slavery in the fishing industry?

While the initial analysis was undertaken on the top 20 fishing countries, it is reasonable to assume that the results can be applied to all fishing countries. While not a confirmation of actual incidence of modern slavery in fishing, given the hidden and out of sight nature of this crime, modelling can provide important insights into likely

pockets of risk that may have been previously unknown. For countries assessed in the Global Slavery Index 2016, each fishing country<sup>19</sup> has been rated according to each of the six risk factors. These ratings were transformed into a ranking of low, medium, or high vulnerability to modern slavery in the fishing industry, according to both National Fisheries Policy, and Wealth and Institutional Capacity. A country's vulnerability on these two factors together represent their overall vulnerability to modern slavery within their fishing industry. Country specific results are presented in Table 1.

#### **TABLE 1**

Fishing countries classified by National Fisheries Policy (catch outside EEZ, distant water fishing, and subsidies), and Wealth and Institutional Capacity (GDP per capita, value landed per fisher, and unreported landings)

Country	National Fisheries Policy	Wealth and Institutional Capacity	Country	National Fisheries Policy	Wealth and Institutional Capacity
Albania	•	•	Dominican Republic	•	•
Algeria	•	•	Ecuador	•	•
Angola	•	•	Egypt	•	•
Argentina	•	•	El Salvador	•	•
Australia	•	•	Equatorial Guinea	•	•
Bahrain	•	•	Eritrea	•	•
Bangladesh	•	•	Estonia	•	•
Barbados	•	•	Finland	•	•
Belgium	•	•	France	•	•
Benin	•	•	Gabon	•	•
Brazil	•	•	Gambia	•	•
Brunei Darussalam	•	•	Georgia	•	•
Bulgaria	•	•	Germany	•	•
Cambodia	•	•	Ghana	•	•
Cameroon	•	•	Greece	•	•
Canada	•	•	Guatemala	•	•
Cape Verde	•	•	Guinea	•	•
Chile	•	•	Guyana	•	•
China	•	•	Haiti	•	•
Colombia	•	•	Honduras	•	•
Costa Rica	•	•	Iceland	•	•
Côte d'Ivoire	•	•	India	•	•
Croatia	•	•	Indonesia	•	•
Cuba	•	•	Iran, Islamic Republic of	•	•
Cyprus	•	•	Iraq	•	•
Denmark	•	•	Ireland	•	•
Djibouti	•	•	Israel	•	•

Table 1 continued.

Country	National Fisheries Policy	Wealth and Institutional Capacity	Country	National Fisheries Policy	Wealth and Institutional Capacity
Italy	•	•	Portugal	•	•
Japan	•	•	Qatar	•	•
Kenya	•	•	Republic	•	•
Korea, Democratic People's Republic of			of the Congo Romania	•	•
(North Korea)	•		Russia	•	•
Korea, Republic of (South Korea)	•	•	Saudi Arabia	•	•
Kuwait	•	•	Senegal		•
Latvia	•	•	Sierra Leone		•
Lebanon	•		Singapore		
Liberia	•		Slovenia	•	•
Libya			Somalia	•	•
Lithuania			South Africa	•	•
Madagascar			Spain	•	•
			Sri Lanka	•	•
Malaysia Mauritania			Sudan	•	•
			Suriname	•	•
Mauritius			Sweden	•	•
Mexico			Syria	•	•
Montenegro			Taiwan, China	•	•
Morocco	•		Tanzania, United		
Mozambique			Republic of		
Myanmar	•		Thailand	•	•
Namibia	•		Timor-Leste	•	•
Netherlands	•	•	Togo	•	•
New Zealand	•	•	Trinidad and Tobago	•	•
Nicaragua	•	•	Tunisia	•	•
Nigeria	•	•	Turkey	•	•
Norway	•	•	Ukraine	•	•
Oman	•	•	United Arab Emirates	•	•
Pakistan	•	•	United Kingdom	•	•
Panama	•	•	United States	•	•
Papua New Guinea	•	•	Uruguay	•	•
Peru	•	•	Venezuela, Bolivarian	•	•
Philippines	•	•	Republic of Vietnam	•	
Poland	•	•	Yemen		

#### Legend

High vulnerability
 Medium vulnerability
 Low vulnerability

#### Recommendations: Reducing modern slavery in the fishing industry

Almost all countries either catch or consume fish, and fishing plays a pivotal role in the livelihoods of millions of people around the world. It is fundamental to the long-term sustainability of this industry to address issues of social justice and labour. Ensuring safe labour conditions involves not just the country to which a vessel is registered, but also the country in whose waters fishing occurs (or where fishing occurs on the high seas, the regional fisheries management organisations), the home country of the fishers, and the countries in which fish are processed and consumed. Governments and businesses need to focus on the following combination of strategies:

## 1 / Establish a platform that enables labour standards to be protected

Minimum international standards for working conditions should be mandatory and enforced so that migrant workers can be sure of benefiting from employment in fishing. Ratification of the ILO's Work in Fishing Convention (C188) by all major fishing countries would be a major step towards this. Presently, only 10 countries have ratified the convention.

Government licensing of fishing rights or chartering of foreign-flagged vessels should consider known labour issues when granting access to national waters and incorporate audits of crew conditions into their general oversight and monitoring to ensure compliance with local laws and standards.

Registration of crew needs to be made mandatory for all industrial fishing vessels both in the countries fished and the country in which the vessel is registered, and verification of crew should be a standard component of the licensing of fishing vessels to operate. This needs to be backed up and monitored through inspection regimes – an approach that can be implemented both by governments but also by the businesses involved in the supply chain.

#### 2 / Recognise and respond to modern slavery in fisheries as serious and organised crime

Forced labour, slavery, and debt bondage in the fishing industry clearly fall within the recognised definition of serious crime, undertaken by organised criminal groups.<sup>20</sup> Accordingly, there are already myriad international treaties, national laws, and specialist investigative units that have been established to ensure governments are equipped to respond to the jurisdictional and practical challenges of these complex types of crimes. Recognising modern slavery in the fishing industry as a serious crime places responsibility for enforcement with national criminal investigative and law enforcement institutions, rather than with fisheries management bodies that are typically poorly equipped to deal with such criminal activities. There is an urgent need to ensure that consideration of modern slavery is brought to bear on other initiatives targeting illegal, unreported, and unregulated fishing (IUU) from an environmental or markets perspective. For example, it is significant that Interpol's anti-IUU project "SCALE," whose mission is to tackle organised crime in fishing, is now being expanded to explicitly include labour crimes.

## 3 / Improve "net-to-table" traceability of fisheries product and labour

Seafood supply chains can be particularly complex, and the source of seafood is often poorly documented given the prevalence of transshipment<sup>21</sup> of fish catch, seafood re-exportation, and numerous stages of processing (e.g. for canning and production of other products, such as pet food). Governments and seafood traders can both play a role in improving seafood supply chain transparency, ensuring that seafood is legally caught, humanely produced, and honestly labelled.<sup>22</sup>

It is crucial that governments cooperate to regulate and oversee transshipment—a practice that sees fishing catch and/or crew transferred between vessels offshore. If abused, transshipment can be used to disguise the real source of the fishing catch (a kind of "fish laundering") and allow illegally caught seafood to be exported and consumed around the globe.<sup>23</sup>

Legislative reforms should be introduced to improve vessel tracking, for example through mandatory adoption of ship tracking numbers and compulsory uptake of remote vessel monitoring technologies, which can assist in the identification of illegal activities, such as the transshipment of catch or crew at sea.<sup>24</sup>

Strengthened legislative requirements for auditing both social and environmental elements of seafood will provide greater support for seafood traceability organisations and seafood retailers to address labour practices. Incorporating labour practices in national supply chain policy and legislation would provide consumers with confidence that their seafood is both sustainable and ethically caught.

Initiatives led by business that promote supply chain transparency inclusive of labour conditions can provide consumers with assurances that the seafood they purchase is at low risk of modern slavery in its supply chain and motivate industry partners and competitors to improve their labour practices.

Increasing consumer awareness of the implications of their seafood choices needs to build on the work of NGOs such as the Marine Stewardship Council and Monterey Bay Aquarium in promoting sustainable seafood, and Fair Trade International in providing ethically produced products in other industries, such as coffee.

Enforcement and traceability can be bolstered through the use of technology, by reducing enforcement and detection costs, and by automating and safeguarding information flows within supply chains. This is relevant to both governments and businesses wanting to establish better governance in their fisheries labour markets. For example, identification for fishers based on facial recognition, fingerprint identification, and the use of encryption algorithms such as blockchain technology can help simplify and render tamper-proof otherwise convoluted registration processes that are critical to:

Increasing transparency around crewing arrangements in the industry (a strategy currently being piloted in the context of trafficked children<sup>25</sup>), and reducing the invisibility of crews.

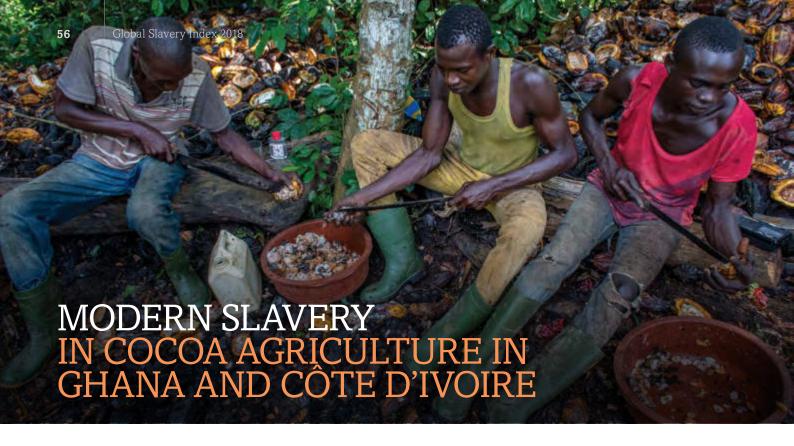
Tracking the international movements of vulnerable fishers.

#### 4 / Recognise and address the link between subsidies, industrial over-capacity, and labour abuses

Government subsidies support fishing that is no longer profitable by reducing capital and operating costs, thus sustaining fleet overcapacity and competition for already depleted resources. In particular, such "harmful" subsidies typically underpin long-distance fishing activity, behaviour that constitutes a major risk factor for slavery in the industry. The capping or elimination of harmful subsidies, in conjunction with reduced fleet capacity, will ease pressure on already over-exploited marine resources and reduce a key driver of labour exploitation.

In conjunction with subsidy reduction, halting the current decline in global fisheries will require reducing industrial capacity (e.g. through buy-back schemes<sup>26</sup>) and enhancing and enforcing measures that promote rebuilding of fish stocks. Concurrently promoting the development and empowerment of sustainable and well-managed small-scale fisheries, especially in coastal developing countries, will increase the availability of sustainable livelihoods in fishing. For instance, funds from harmful subsidies could be directed towards the creation and maintenance of marine protected areas in coastal waters, which will promote rebuilding of vulnerable fish stocks.

Tighter and better enforced restrictions on industrial fishing on the high seas would reduce the complexity and cost of policing fisheries-related and labour crimes in the remotest areas of the oceans. The high seas are those areas of the oceans over which no individual country has territorial jurisdiction, and oversight of fishing operations, including the monitoring of labour practices, is normally limited by both capacity and the scale of the area to be monitored. While challenging, both practically and politically, tighter restrictions on high seas fishing by international fleets would increase the share of revenue captured by developing coastal nations, contributing to a reduction in the vulnerability of the populations currently at most risk of modern slavery.



Ghana and Côte d'Ivoire are the world's two largest cocoa producers, with their combined production contributing 60 percent of the world's annual supply of cocoa.<sup>27</sup> The Walk Free Foundation, in partnership with Tulane University, and with funding from Dutch chocolate company Tony's Chocolonely and the Chocolonely Foundation, undertook representative surveys in medium and high cocoa producing areas of Ghana and Côte d'Ivoire with the aim of estimating the prevalence of forced labour of both adults and children, as well as child labour, in cocoa agriculture in these areas.<sup>29</sup>

# How we measured modern slavery in cocoa agriculture

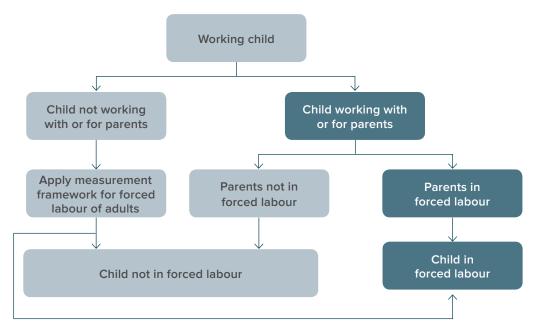
The criteria for classifying forced labour of adults for statistical purposes reflect the criteria currently used by the ILO. Where children are concerned, we sought to apply the ILO measurement framework<sup>28</sup> (see Figure 1). However, gaps in data meant that some aspects were not able to be measured (explained below). Also, additional information is presented to allow deeper understanding of the impact of family structures on forced labour.

While the ILO considers that children working for parents in forced labour are themselves in forced labour, our study did not capture data that would enable us to estimate the number of these children, so this aspect is not included in our estimates and, as a result, there is likely an underestimate of the overall number of children in forced

labour. At the same time, when it comes to estimating the number of children who are forced to work,<sup>29</sup> the ILO includes children who are forced to work by any family members who are not a parent. Consultations with experts with in-depth knowledge of the cocoa sector of Ghana and Côte d'Ivoire highlighted that, in the context of children working in cocoa agriculture, relatives other than parents (for instance, aunts, uncles, siblings, grandparents) are often primary caregivers who take on the role of parent and make decisions for the child. To account for this, in this study we also present estimates of the number of children forced to work in cocoa agriculture by someone who was not a family member, in addition to estimates of those who were forced to work by someone other than a parent.

FIGURE 1

ILO measurement framework for forced labour of children<sup>30</sup>



# Prevalence of modern slavery in cocoa agriculture in Ghana and Côte d'Ivoire

#### **GHANA**

In August of 2017, interviews were conducted in Ghana with adults (aged 18 years and over) and children (aged 10 to 17 years) residing areas of medium and high cocoa production and who had worked in cocoa agriculture in the preceding 12 months. Surveys sought information on a respondent's own experiences of forced labour in cocoa agriculture between 2013 and 2017, and for children, their own experiences of child labour in cocoa agriculture in the preceding 12 months. The analysis included surveys from 903 adults and 715 children.

#### Adults in forced labour in cocoa agriculture

An estimated 1.1 million adults worked in cocoa agriculture in the medium and high cocoa growing areas of Ghana between August 2016 and August 2017. We found that for every 1,000 adult cocoa workers in medium and high cocoa growing areas, an estimated 3.3 were victims of forced labour between 2013 and 2017.<sup>31</sup> This corresponds to approximately 3,700 adult victims of forced labour in cocoa agriculture in that time.

#### Forced labour of children in cocoa agriculture

Our findings suggest an estimated 708,000 children worked in cocoa agriculture in medium and high cocoa producing areas of Ghana between August 2016 and August 2017. It is estimated that for every 1,000 children working in cocoa

agriculture in areas of medium and high cocoa production, approximately 1.5 were victims of child forced labour at the hands of someone outside the family between 2013 and 2017.<sup>32</sup> This equates to around 1,000 victims of child forced labour in cocoa agriculture in medium to high production areas over that period.

In line with the ILO criteria for forced labour of children, when including those who had been forced to work in cocoa agriculture by someone other than a parent, this estimate increased to 20 children in child labour per 1,000 children working in cocoa agriculture in these areas between 2013 and 2017,<sup>33</sup> a higher rate than the national rate of modern slavery in Ghana. Hence, an estimated 14,000 children working in cocoa agriculture were victims of child forced labour in these areas between 2013 and 2017.

Forced labour of children takes place in the context of high levels of child labour. Of the estimated 708,000 children aged 10 to 17 years who worked in cocoa agriculture in medium and high cocoa producing areas of Ghana between August 2016 and August 2017, just over 94 percent,<sup>34</sup> or approximately 668,000 children, experienced child labour (children performing either hazardous labour in the previous 12 months, exceeding maximum allowable working hours for children their age in the previous week, or both). Of those in child labour, an estimated 632,000 children performed hazardous work, equating to slightly more than 89 percent<sup>35</sup> of all children working in cocoa agriculture in these areas. Of the participants who reported hazardous work, 81 percent reported carrying heavy loads and 71 percent reported using sharp tools.<sup>36</sup>

Côte d'Ivoire, Farmers breaking up harvested cocoa pods.

Photo credit: Godong/UIG via Getty Images

#### CÔTE D'IVOIRE

In October and November of 2017, interviews were conducted in Côte d'Ivoire with adults (aged 18 years and over) and children (aged 10 to 17 years) residing areas of medium and high cocoa production and who had worked in cocoa agriculture in the preceding 12 months. Surveys sought information on a respondent's own experiences of forced labour in cocoa agriculture between 2013 and 2017, and for children, their own experiences of child labour<sup>37</sup> in cocoa agriculture in the preceding 12 months. The analysis included surveys from 920 adults and 664 children.

#### Adults in forced labour in cocoa agriculture

We estimate that just under 2.3 million adults worked in cocoa agriculture in medium and high cocoa producing areas of Côte d'Ivoire between October 2016 and November 2017. An estimated 4.2 adult workers<sup>38</sup> per 1,000 adult workers in cocoa agriculture, equating to around 10,000 people aged 18 years and over, experienced forced labour in cocoa agriculture between 2013 and 2017.

#### Forced labour of children in cocoa agriculture

The results of our study suggest that, in total, 891,000 children aged 10 to 17 years worked in cocoa production in medium and high cocoa producing areas of Côte d'Ivoire between October 2016 and November 2017. None of the children surveyed in the present study reported being forced to work by someone outside the family between 2013 and 2017. While this result may indicate the problem is not widespread in these areas within Côte d'Ivoire, it

may otherwise reflect limitations in survey design or the difficulty of identifying crimes of this nature through self-reporting by children.

In line with the ILO definition of child forced labour, an estimated 1.7 children<sup>39</sup> were forced to work by someone other than a parent per 1,000 children working in cocoa agriculture in these areas between 2013 and 2017. This equates to approximately 2,000 victims of forced child labour.

As with Ghana, forced labour of children in Côte d'Ivoire occurs in a context of endemic child labour. An estimated 93 percent of the children<sup>40</sup> working in medium and high cocoa growing areas of Côte d'Ivoire were found to have experienced child labour in the year preceding the survey, equating to around 829,000 children in child labour (children performing either hazardous labour in the previous 12 months, exceeding maximum allowable working hours for children their age in the previous week, or both). Of those in child labour, an estimated 769,000 children worked under hazardous conditions in the previous year, corresponding to an estimated 86 percent of all children<sup>41</sup> working in cocoa agriculture in these areas. Of the participants who reported hazardous work, 70 percent reported they had worked with sharp tools, 59 percent had been involved in land clearing, and 60 percent had lifted heavy loads in cocoa agriculture in the previous year.<sup>42</sup>

Shanghai: show case with chocolates in a supermarket. Cocoa from West Africa is a key ingredient in chocolate sold globally, Some of this cocoa has been harvested by forced labour.

Photo credit: Eckel/ullstein bild via Getty Images



# Drivers of modern slavery in cocoa agriculture

Consistent with prior research on the extent of child labour in cocoa agriculture, child labour is common in the study areas and is characterised largely by children's involvement in hazardous work. As the survey results confirm, within this context, it is not surprising that forced labour also occurs.

Understanding the factors that likely drive these practices is crucial to developing effective responses. Cocoa agriculture is generally characterised by small-scale farming, with around 90 percent of the world's cocoa being produced on small, independent farms of one to five hectares.<sup>43</sup> Production is highly decentralised among an estimated 4.5 million small-scale cocoa producers globally<sup>44</sup> and cocoa farming is generally the main source of income for families living in cocoa growing communities. Therefore, cocoa farmers and their families' livelihoods are highly dependent on farm yields and cocoa prices.<sup>45</sup> Furthermore, work in cocoa agriculture is characterised by long hours in the sun performing physically demanding work, the use of hazardous cutting tools and pesticides, and it requires travelling great distances and carrying heavy loads.46

As with the drivers of modern slavery seen in other sectors, what underlies a person's risk to modern slavery in cocoa agriculture is an interplay of individual and environmental factors that create a setting primed for labour exploitation to take place. Available literature and research on labour exploitation in cocoa farming suggests that this exploitation is driven and reinforced by:

- > Chronic poverty of farmers: The average cocoa farmer earns around 50 cents (US\$) a day in Côte d'Ivoire and about 84 cents (US\$) a day in Ghana, well below the extreme poverty line of US\$1.25 per day.<sup>47</sup> Given the small scale of farms, relatively low yield, and little power to influence value distribution across the cocoa value chain, increasing profits in the sector<sup>48</sup> have not reached cocoa farmers, and their income remains very low.<sup>49</sup> This drives demand for cheap labour, allowing an environment where labour exploitation and modern slavery can exist.
- Price instability of cocoa on the world market in combination with feeble bargaining power of smallscale farmers: Farmers are constantly under pressure to find ways to sustain their livelihoods which may include cutting labour costs.<sup>50</sup>
- Low levels/quality of education: West Africa has some of the lowest literacy rates in the world.<sup>51</sup> Lack of access to quality education means that cocoa farmers and adults in cocoa growing communities remain uneducated and unskilled, further exacerbating cycles of poverty.<sup>52</sup>
- The nature of small-scale farming: Given that most cocoa is grown on independent smallholder plots and most farmers are not part of larger farmer organisations, there is a clear lack of governance structures and

- oversight,<sup>53</sup> which provides opportunities to exploit workers with little fear of penalty.
- Low prosecution rates resulting from lack of access to police and justice: Cases of exploitation are rarely reported to the authorities. This is due to difficulties in being able to reach police stations from remote communities to and from which there is little or no easy means of transport.<sup>54</sup>

#### Business and government working towards the elimination of modern slavery in cocoa agriculture

Businesses, driven partly by consumer desire for ethically sourced chocolate, have undertaken efforts towards addressing exploitation of children in their cocoa supply chains and have funded prevention initiatives in source communities.55 In particular, key pieces of research on the size of the issue of child labour in the cocoa sector of West Africa<sup>56</sup> were spurred by the formation of the Harkin-Engel Protocol in 2001.<sup>57</sup> This voluntary industry initiative was developed in partnership with US Senator Tom Harkin and Representative Eliot Engel in effort to eradicate the Worst Forms of Child Labour<sup>58</sup> in the growing and processing of cocoa. Other initiatives have included the implementation of monitoring and remediation systems for child labour, community education to increase awareness of the dangers of child labour among members, and farmer cooperatives to reduce farmer costs, strengthen their bargaining power, and set and maintain payment standards. However, there has been limited focus on forced child labour and forced labour in adults in cocoa agriculture, and a relatively small amount of data has been collected.

Another step aimed at reducing modern slavery in cocoa agriculture was made at the 2017 UN Climate Change Conference, with the governments of Côte d'Ivoire and Ghana joining with leading chocolate and cocoa companies in announcing the "Frameworks for Action" to eliminate illegal cocoa agriculture in national parks. The actions are consistent with the Paris Climate Agreement and include key development partners including the British, Dutch and Swiss governments, as well as the World Bank.<sup>59</sup> In 2017, Ghana made efforts towards the implementation of its National Plan of Action Phase II on the Elimination of the Worst Forms of Labor.<sup>60</sup> The government of Côte d'Ivoire has also demonstrated efforts towards tackling child labour in cocoa, committing to further support the National Child Labour Monitoring System in 2016 and partnering with the International Cocoa Initiative.61

While promising efforts have been made, eliminating modern slavery from cocoa agriculture is a long-term challenge and will require sustained engagement and cooperation by global and local stakeholders, including companies that profit from the end product of cocoa farming, governments of countries that export and those that import cocoa products, as well as the farmers themselves.

# 05 REGIONAL FINDINGS

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Miner working in an Angolan village not far from the Congolese border. Diamond extraction in Angola has over the past decades been linked to torture, murder, and forced displacement, and relies on both child labour and forced labour.

Photo credit: Olivier Polet/Corbis via Getty Images





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### **REGIONAL FINDINGS**

### Prevalence across the regions

Globally, there were 5.4 victims of modern slavery for every 1,000 people in the world. Looking regionally, the prevalence of modern slavery was highest in Africa with 7.6 victims for every 1,000 people in the region (Figure 1). This was followed by Asia and the Pacific (6.1 victims) and Europe and Central Asia (3.9 victims). The prevalence in the Arab States and Americas was lower, at 3.3 and 1.9 victims per 1,000 people respectively (noting the caveats below regarding data limitations, particularly in the Arab States).

When we separated forced labour and forced marriage, a different regional picture emerged. For forced labour, Asia and the Pacific had the highest prevalence (4.0 victims for every 1,000 people), followed by Europe and Central Asia (3.6) and Africa (2.8). The prevalence of forced labour was lowest in the Arab States (2.2 victims) and the Americas (1.3 victims). The prevalence of forced marriage was highest in Africa (4.8 victims), followed by Asia and the Pacific region (2.0 victims), and the Arab States (1.1 victims). The prevalence was lowest in the Americas (0.7 per 1,000 people) and Europe and Central Asia (0.4 victims).

At the regional level, the impact of conflict and state-imposed forced labour remained consistent with the global findings, with the highest prevalence occurring primarily in countries with well-documented state-imposed forced labour or marked by protracted or recent conflict. The countries with highest prevalence across the regions included Eritrea, Burundi, and the Central African Republic (Africa); Venezuela, Haiti, and Dominican Republic (Americas); North Korea, Afghanistan, and Pakistan (Asia and the Pacific); Syria, Iraq, and Yemen (Arab States); and Belarus, Turkmenistan, and Macedonia (Europe and Central Asia).

#### Data limitations – prevalence

While regional estimates of prevalence of modern slavery were presented in the Global Estimates of Modern Slavery, critical gaps in available data were noted. These are particularly problematic in the Arab States where only two national surveys were undertaken, neither of which was a Gulf Cooperation Council (GCC) country, despite the incidence of forced labour reported by various sources in such sectors as domestic work and construction in the GCC. Further, measurement of forced marriage among residents of countries within the region is particularly problematic where there are no surveys. Taken together, these gaps point to a significant underestimate of the extent of modern slavery in this region.

Similarly, it is typically not possible to survey in countries that are experiencing profound and current conflict, such as Syria, Iraq, Yemen, Libya, South Sudan, and parts of Nigeria and Pakistan. Yet it is known that conflict is a significant risk factor – the breakdown of the rule of law, the loss of social supports, and the disruption that occurs with conflict all increase risk of both forced labour and forced marriage. The lack of data from countries experiencing conflict means that modern slavery estimates in regions where conflict countries are situated will understate the problem. Drawing on vulnerability data goes some way towards mitigating the impact of this gap; however, the need for better data in conflict countries remains an urgent research priority.

FIGURE 1
Regional prevalence of modern slavery (per 1,000 population) by category



### Vulnerability across the regions

An improved understanding of the drivers of modern slavery – that is, the factors that increase vulnerability to modern slavery – is critical to the development of successful interventions. Our assessment of vulnerability is conducted at the national level and covers five dimensions: governance issues, lack of basic needs, inequality, disenfranchised groups, and effects of conflict (see Appendix 2: Part A.¹)

A regional analysis of our vulnerability measures suggests higher risk of modern slavery in the Arab States and the Americas than is evident in the prevalence data. The Arab States had the second highest vulnerability scores across the five regions, despite having relatively low prevalence estimates.

The Africa region had the highest average vulnerability score (62 percent), followed by the Arab States (57 percent), Asia and the Pacific (46 percent), and the Americas (41 percent), while the lowest levels of vulnerability are found in Europe and Central Asia (28 percent); (Figure 3). Looking behind the overall vulnerability scores to the dimension level, it is apparent that across the regions, vulnerability related to governance issues, lack of basic needs, and disenfranchised groups were highest in Africa, vulnerability related to inequality was highest in the Americas, and vulnerability related to conflict was highest in the Arab States (Table 1). Figure 3 shows how countries in the region scored in relation to the regional average on each dimension of vulnerability.

Princess, 43, trafficked from Nigeria into forced sexual exploitation in Italy.

"We saw people return from Europe rich. A woman said she would give me work in a Nigerian restaurant in Italy. When I arrived I was told I had to pay back a £40,000 debt before I could leave. They said they would kill me if I didn't work as a prostitute. The work was so dangerous. I was stabbed twice. I managed to leave, and now I work to help other women escape. These traffickers take everything from you – all that makes you human."

Photo credit: Quintina Valero for The Guardian



FIGURE 2
Overall vulnerability score dot plot with regional averages (higher number indicates higher vulnerability)



TABLE 1
Regional average vulnerability scores by dimension (higher number indicates higher vulnerability)

Region	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Africa	60.8	38.4	43.1	44.5	35.7	62.0
Americas	44.3	21.4	49.9	33.5	22.9	41.4
Arab States	64.8	24.6	41.2	33.4	40.0	57.2
Asia and the Pacific	49.3	31.1	32.3	34.0	32.4	46.1
Europe and Central Asia	34.6	16.8	30.2	34.5	20.1	28.2
Total	48.6	27.0	38.4	37.3	28.7	45.6

# Government responses across the regions

The Europe and Central Asia region had the strongest response to modern slavery, with countries scoring an average BB rating. Within the broader Europe and Central Asia region, European governments in particular are generally characterised by both high levels of political will and resources, and this is backed up by regional bodies that provide monitoring and oversight. The Americas had the second strongest responses to modern slavery, scoring an average B rating, reflecting improvements in both victim identification mechanisms and support services. Both Asia and the Pacific and the Arab States have a CCC rating on government responses. However, the responses

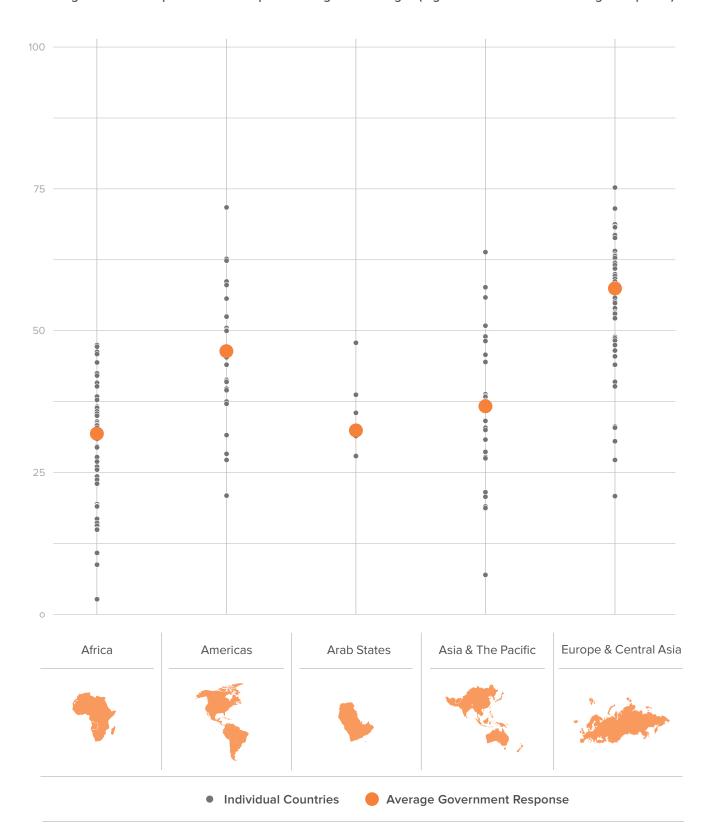
themselves within these two regions were different, with some countries in the Asia and the Pacific region starting to provide safety nets and protections for people in high risk sectors or groups. The Africa region, with a CC rating, had the lowest average regional government response score, but this should not diminish important improvements made in recent years, including introduction of criminal laws and national referral mechanisms in several countries including Côte d'Ivoire and Sierra Leone. Despite this, in Africa, limited resources and ongoing conflict continued to hinder more comprehensive responses to modern slavery.

TABLE 2
Government response rating and milestone percentage by region

Average rating	Regions	Support survivor	Criminal justice	Coordination	Address risk	Supply chains
CC	Africa	28.2	30.9	32.9	42.5	0.3
В	Americas	46.5	48.7	47.2	62.8	4.1
CCC	Arab States	43.3	35.3	30.5	40.5	0.0
CCC	Asia and the Pacific	37.5	36.9	35.6	48.1	1.0
ВВ	Europe and Central Asia	57.4	57.0	57.4	64.6	10.9

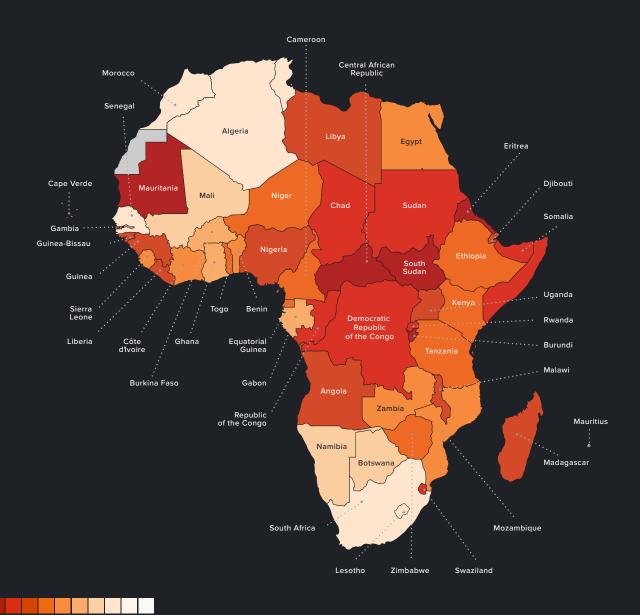
FIGURE 3

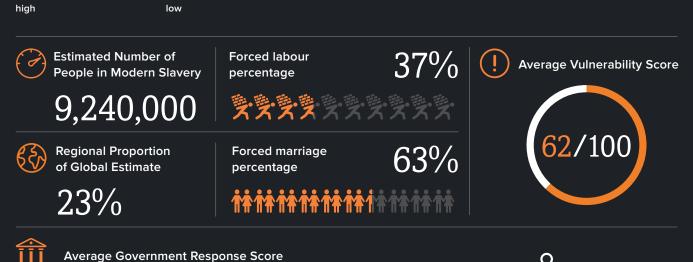
Overall government response score dot plot with regional averages (higher number indicates stronger response)



## AFRICA

#### **REGION HIGHLIGHTS**





AAA AA BBB BB B CCC CC C D

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With 51 countries and 16 percent of the world's population, Africa is enormously diverse in terms of history, development, people, culture, and religion. This regional study summarises a longer set of findings that can be found in the *Global Slavery Index: Africa Report*.

#### Prevalence within Africa

On any given day in 2016, an estimated 9.2 million men, women, and children were living in modern slavery in Africa. The region has the highest prevalence of modern slavery in the world with 7.6 per 1,000 people in the region.

When considering the forms of modern slavery, the rate of forced marriage (4.8 victims per 1,000 people in the region) was higher than the rate of forced labour (2.8 victims per 1,000 people in the region).

Over half of all victims of forced labour exploitation (54 percent) were held in debt bondage, with similar proportions of men and women in the region trapped through debt. An estimated 400,000 people in the region were victims of forced sexual exploitation, accounting for eight percent of all victims of forced sexual exploitation and commercial sexual exploitation of children worldwide.

Within the region, Eritrea, Burundi, and Central African Republic were the countries with the highest prevalence of modern slavery; however, Nigeria and the Democratic Republic of the Congo had the highest absolute number and accounted for over one-quarter (26.3 percent) of all victims in the region.

These regional figures, while important, should be interpreted cautiously given the gaps and limitations of data in certain countries. For example, it is not possible to survey in countries that are experiencing profound and current conflict, such as Libya, South Sudan, and parts of Nigeria. The lack of data from countries experiencing conflict means that modern slavery estimates in these countries are likely to understate the problem.<sup>2</sup>

TABLE 3
Estimated prevalence of modern slavery by country, Africa

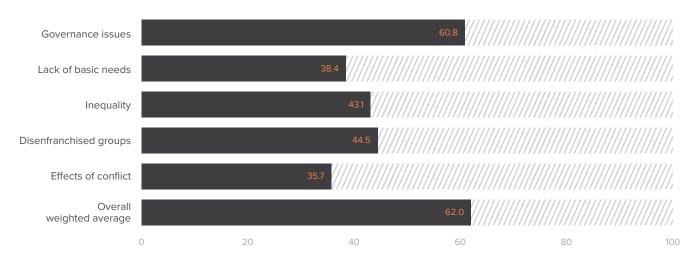
Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
1	Eritrea	93.0	451,000	4,847,000
2	Burundi	40.0	408,000	10,199,000
3	Central African Republic	22.3	101,000	4,546,000
4	Mauritania	21.4	90,000	4,182,000
5	South Sudan	20.5	243,000	11,882,000
6	Somalia	15.5	216,000	13,908,000
7	Congo, Democratic Republic of the	13.7	1,045,000	76,197,000
8	Sudan	12.0	465,000	38,648,000
9	Chad	12.0	168,000	14,009,000
10	Rwanda	11.6	134,000	11,630,000
11	Swaziland	8.8	12,000	1,319,000
12	Congo	8.0	40,000	4,996,000
13	Guinea	7.8	94,000	12,092,000
14	Libya	7.7	48,000	6,235,000
15	Nigeria	7.7	1,386,000	181,182,000
16	Uganda	7.6	304,000	40,145,000

Table 3 continued.

17         Madagascar         7.5         182,000         24,234,000           18         Malawi         7.5         13,000         17,574,000           19         Guinea-Bissau         7.5         13,000         1,771,000           20         Liberia         7.4         33,000         4,500,000           21         Angola         7.2         199,000         27,859,000           22         Djibouli         7.1         7,000         927,000           23         Kerya         6.9         328,000         47,236,000           24         Cameroon         6.9         157,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         133,000         19,897,000           27         Zimbabwe         6.7         105,000         1,775,000           28         Equatorial Guinea         6.4         7,000         1,775,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         64,000         99,873,000           31         Cote d'Ivoire         5.9         1	Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
19         Guinea-Bissau         7.5         13,000         1,771,000           20         Liberia         7.4         33,000         4,500,000           21         Angola         7.2         199,000         27,850,000           22         Djibouti         7.1         7,000         927,000           23         Kenya         6.9         328,000         47,236,000           24         Cameroon         6.9         157,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         133,000         19,897,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.5         58,0	17	Madagascar	7.5	182,000	24,234,000
20         Liberia         7.4         33,000         4,500,000           21         Angola         7.2         199,000         27,859,000           22         Djibouti         7.1         7,000         927,000           23         Kenya         6.9         328,000         47,236,000           24         Cameroon         6.9         187,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         58,000         93,778,000           35         Benin         5.5         58,000	18	Malawi	7.5	131,000	17,574,000
21         Angola         7.2         199,000         27,859,000           22         Djibouti         7.1         7,000         927,000           23         Kenya         6.9         328,000         47,236,000           24         Cameroon         6.9         157,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         105,000         15,777,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         64,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         58,000         93,778,000           35         Benin         5.5         58,000	19	Guinea-Bissau	7.5	13,000	1,771,000
22         Djibouti         7.1         7,000         927,000           23         Kenya         6.9         328,000         47,236,000           24         Cameron         6.9         157,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         105,000         19,877,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.8         11,000         1,978,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000 <td>20</td> <td>Liberia</td> <td>7.4</td> <td>33,000</td> <td>4,500,000</td>	20	Liberia	7.4	33,000	4,500,000
23       Kenya       6.9       328,000       47,236,000         24       Cameroon       6.9       157,000       22,835,000         25       Togo       6.8       50,000       7,417,000         26       Niger       6.7       133,000       19,897,000         27       Zimbabwe       6.7       105,000       11,775,000         28       Equatorial Guinea       6.4       7,000       1,175,000         29       Tanzania, United Republic of       6.2       336,000       53,880,000         30       Ethiopia       6.1       614,000       99,873,000         31       Côte d'Ivoire       5.9       137,000       23,108,000         32       Gambia       5.8       11,000       1,978,000         33       Zambia       5.7       92,000       16,101,000         34       Egypt       5.5       518,000       93,778,000         35       Benin       5.5       58,000       10,576,000         36       Mozambique       5.4       152,000       28,011,000         37       Sierra Leone       5.0       36,000       7,237,000         38       Ghana       4.8       193,000	21	Angola	7.2	199,000	27,859,000
24         Cameroon         6.9         157,000         22,835,000           25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         133,000         19,897,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         1	22	Djibouti	7.1	7,000	927,000
25         Togo         6.8         50,000         7,417,000           26         Niger         6.7         133,000         19,897,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,00	23	Kenya	6.9	328,000	47,236,000
26         Niger         6.7         133,000         19,897,000           27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         11,75,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         2,7583,000           40         Burkina Faso         4.5	24	Cameroon	6.9	157,000	22,835,000
27         Zimbabwe         6.7         105,000         15,777,000           28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         518,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1	25	Togo	6.8	50,000	7,417,000
28         Equatorial Guinea         6.4         7,000         1,175,000           29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         <	26	Niger	6.7	133,000	19,897,000
29         Tanzania, United Republic of         6.2         336,000         53,880,000           30         Ethiopia         6.1         614,000         99,873,000           31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000	27	Zimbabwe	6.7	105,000	15,777,000
30       Ethiopia       6.1       614,000       99,873,000         31       Côte d'Ivoire       5.9       137,000       23,108,000         32       Gambia       5.8       11,000       1,978,000         33       Zambia       5.7       92,000       16,101,000         34       Egypt       5.5       518,000       93,778,000         35       Benin       5.5       58,000       10,576,000         36       Mozambique       5.4       152,000       28,011,000         37       Sierra Leone       5.0       36,000       7,237,000         38       Ghana       4.8       133,000       27,583,000         39       Gabon       4.8       9,000       1,930,000         40       Burkina Faso       4.5       82,000       18,111,000         41       Lesotho       4.2       9,000       2,175,000         42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000	28	Equatorial Guinea	6.4	7,000	1,175,000
31         Côte d'Ivoire         5.9         137,000         23,108,000           32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000	29	Tanzania, United Republic of	6.2	336,000	53,880,000
32         Gambia         5.8         11,000         1,978,000           33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000 </td <td>30</td> <td>Ethiopia</td> <td>6.1</td> <td>614,000</td> <td>99,873,000</td>	30	Ethiopia	6.1	614,000	99,873,000
33         Zambia         5.7         92,000         16,101,000           34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000           47         South Africa         2.8         155,000         55,291,000 <td>31</td> <td>Côte d'Ivoire</td> <td>5.9</td> <td>137,000</td> <td>23,108,000</td>	31	Côte d'Ivoire	5.9	137,000	23,108,000
34         Egypt         5.5         518,000         93,778,000           35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000           47         South Africa         2.8         155,000         55,291,000           48         Algeria         2.7         106,000         39,872,000 </td <td>32</td> <td>Gambia</td> <td>5.8</td> <td>11,000</td> <td>1,978,000</td>	32	Gambia	5.8	11,000	1,978,000
35         Benin         5.5         58,000         10,576,000           36         Mozambique         5.4         152,000         28,011,000           37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000           47         South Africa         2.8         155,000         55,291,000           48         Algeria         2.7         106,000         39,872,000           49         Morocco         2.4         85,000         34,803,000<	33	Zambia	5.7	92,000	16,101,000
36       Mozambique       5.4       152,000       28,011,000         37       Sierra Leone       5.0       36,000       7,237,000         38       Ghana       4.8       133,000       27,583,000         39       Gabon       4.8       9,000       1,930,000         40       Burkina Faso       4.5       82,000       18,111,000         41       Lesotho       4.2       9,000       2,175,000         42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	34	Egypt	5.5	518,000	93,778,000
37         Sierra Leone         5.0         36,000         7,237,000           38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000           47         South Africa         2.8         155,000         55,291,000           48         Algeria         2.7         106,000         39,872,000           49         Morocco         2.4         85,000         34,803,000           50         Tunisia         2.2         25,000         11,274,000	35	Benin	5.5	58,000	10,576,000
38         Ghana         4.8         133,000         27,583,000           39         Gabon         4.8         9,000         1,930,000           40         Burkina Faso         4.5         82,000         18,111,000           41         Lesotho         4.2         9,000         2,175,000           42         Cape Verde         4.1         2,000         533,000           43         Mali         3.6         62,000         17,468,000           44         Botswana         3.4         8,000         2,209,000           45         Namibia         3.3         8,000         2,426,000           46         Senegal         2.9         43,000         14,977,000           47         South Africa         2.8         155,000         55,291,000           48         Algeria         2.7         106,000         39,872,000           49         Morocco         2.4         85,000         34,803,000           50         Tunisia         2.2         25,000         11,274,000	36	Mozambique	5.4	152,000	28,011,000
39       Gabon       4.8       9,000       1,930,000         40       Burkina Faso       4.5       82,000       18,111,000         41       Lesotho       4.2       9,000       2,175,000         42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	37	Sierra Leone	5.0	36,000	7,237,000
40       Burkina Faso       4.5       82,000       18,111,000         41       Lesotho       4.2       9,000       2,175,000         42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	38	Ghana	4.8	133,000	27,583,000
41       Lesotho       4.2       9,000       2,175,000         42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	39	Gabon	4.8	9,000	1,930,000
42       Cape Verde       4.1       2,000       533,000         43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	40	Burkina Faso	4.5	82,000	18,111,000
43       Mali       3.6       62,000       17,468,000         44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	41	Lesotho	4.2	9,000	2,175,000
44       Botswana       3.4       8,000       2,209,000         45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	42	Cape Verde	4.1	2,000	533,000
45       Namibia       3.3       8,000       2,426,000         46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	43	Mali	3.6	62,000	17,468,000
46       Senegal       2.9       43,000       14,977,000         47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	44	Botswana	3.4	8,000	2,209,000
47       South Africa       2.8       155,000       55,291,000         48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	45	Namibia	3.3	8,000	2,426,000
48       Algeria       2.7       106,000       39,872,000         49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	46	Senegal	2.9	43,000	14,977,000
49       Morocco       2.4       85,000       34,803,000         50       Tunisia       2.2       25,000       11,274,000	47	South Africa	2.8	155,000	55,291,000
50 Tunisia 2.2 25,000 11,274,000	48	Algeria	2.7	106,000	39,872,000
	49	Morocco	2.4	85,000	34,803,000
51         Mauritius         1.0         1,000         1,259,000	50	Tunisia	2.2	25,000	11,274,000
	51	Mauritius	1.0	1,000	1,259,000

### Vulnerability within Africa

FIGURE 4
Regional average vulnerability scores by dimension, Africa



The prevalence estimates are consistent with findings from the vulnerability measures, which suggest the Africa region had the highest average vulnerability score (62 percent). The Africa region performed relatively poorly on the governance issues, lack of basic needs, and disenfranchised groups dimensions of the vulnerability model (Figure 5). These rankings reflect the challenges that continue to plague certain countries in this region in terms of resource allocation, effective governance, and acceptance of minority groups. The Central African Republic, South Sudan, and the Democratic Republic of Congo had the highest levels of vulnerability, while Mauritius and Tunisia had the lowest levels of vulnerability in the region.

TABLE 4
Estimated vulnerability to modern slavery by country, Africa

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Central African Republic	85.4	50.2	62.7	58.0	81.6	100.0
South Sudan	75.7	51.1	62.9	56.1	85.7	94.7
Congo, Democratic Republic of	77.2	50.8	55.6	46.5	86.7	91.7
Somalia	80.6	56.8	49.6	22.7	88.4	89.5
Sudan	80.7	46.6	42.4	37.0	87.4	87.1
Chad	71.8	43.2	48.5	46.5	46.1	74.9
Nigeria	54.1	41.3	50.2	47.1	95.5	74.1
Libya	81.4	23.0	49.6	28.1	63.1	73.1
Burundi	72.4	42.6	42.1	48.1	41.7	72.9
Kenya	55.1	48.7	49.6	44.5	66.8	70.6
Guinea-Bissau	77.8	40.1	47.6	44.1	17.1	70.5
Cameroon	65.9	36.5	46.2	46.3	53.9	69.6
Eritrea	71.0	50.6	33.7	48.1	25.9	69.6
Congo	75.1	37.6	48.5	46.1	19.6	69.2
Zimbabwe	66.3	45.5	36.6	53.0	25.3	66.4
Guinea	68.3	32.4	54.7	46.4	28.6	66.3
Niger	61.9	41.2	37.0	45.0	50.4	65.6
Swaziland	69.9	50.0	39.4	38.8	11.7	64.8
Ethiopia	62.4	47.5	27.3	34.6	55.3	64.5
Malawi	55.4	51.5	40.9	61.5	19.1	63.4
Angola	60.2	43.4	48.2	48.5	19.8	62.3
Mauritania	67.3	33.7	39.3	50.5	22.3	62.0
Madagascar	54.4	46.8	51.0	56.8	17.3	62.0
Rwanda	56.6	40.8	40.0	55.7	34.0	61.7
Equatorial Guinea	68.4	40.8	36.7	48.5	10.1	61.7
Togo	70.0	31.5	45.3	42.3	17.1	61.3
Djibouti	66.8	38.0	33.9	48.1	21.3	61.2
Uganda	52.8	48.3	38.2	50.3	35.3	60.8
Tanzania, United Republic of	55.5	47.3	34.9	52.7	29.1	60.5
Egypt	61.6	18.4	44.2	52.8	51.1	60.4
Liberia	55.0	44.0	44.1	54.9	18.2	59.3
Gambia	66.8	28.1	41.8	44.1	20.8	58.4
Lesotho	53.8	50.7	44.6	41.9	18.6	58.3
Côte d'Ivoire  Mozambique	59.5 48.6	30.1 48.3	41.7	37.5 48.1	40.9 30.0	57.2 57.0
Mali	55.3	24.4	35.5	35.9	66.3	55.9
Zambia	45.8	54.4	44.9	49.1	13.1	55.9
Sierra Leone	50.9	46.1	41.2	48.1	18.1	55.2
South Africa	46.7	38.3	61.0	36.9	26.9	53.8
Burkina Faso	58.4	31.6	40.3	35.2	26.2	53.1
Ghana	52.6	29.1	42.0	53.7	21.6	52.2
Algeria	63.2	17.9	27.8	37.0	43.6	52.2
Gabon	56.5	27.1	36.6	47.5	12.4	49.1
Morocco	60.7	18.8	38.1	35.7	22.0	48.3
Namibia	44.6	38.4	55.9	38.8	10.4	48.1
Senegal	43.9	34.8	35.6	41.0	30.9	46.2
3.				•		

Table 4 continued.

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Benin	51.1	28.8	39.9	35.3	15.8	45.0
Cape Verde	48.7	19.7	44.1	44.1	22.1	44.5
Botswana	43.3	37.9	37.3	37.6	9.7	42.1
Tunisia	47.2	15.4	34.8	31.9	33.7	39.2
Mauritius	25.5	17.7	33.6	31.1	12.2	21.2

### Government responses within Africa

TABLE 5
Movements in government response rating for Africa 2016 to 2018

Country	2016 Rating	Change in rating	2018 Rating
South Africa	В	41	В
Senegal	В	41	В
Sierra Leone	В	41	В
Nigeria	В	41	В
Tunisia	CCC	_	В
Côte d'Ivoire	CCC	_	В
Uganda	В	41	В
Mozambique	В	41	В
Egypt	CCC	_	В
Lesotho	CCC	<b>4</b> ▶	CCC
Benin	В	•	CCC
Morocco	CC	<b>A</b>	CCC
Kenya	CC	<b>A</b>	CCC
Algeria	CC	<b>A</b>	CCC
Ethiopia	CCC	41	CCC
Burkina Faso	CCC	41	CCC
Djibouti	CCC	<b>4</b> ▶	CCC
Mauritius	CCC	41	CCC
Gambia	CCC	41	CCC
Rwanda	CCC	41	CCC
Namibia	CCC	41	CCC
Botswana	CC	_	CCC
Tanzania, United Republic of	СС	•	CCC
Madagascar	CC	<b>A</b>	CCC
Zambia	CCC	4▶	CCC
Liberia	CCC	41	CCC
Mali	CC	<b>A</b>	CCC
Angola	CC	41	CC

Country	2016 Rating	Change in rating	2018 Rating
Swaziland	CCC	<b>4</b> ▶	CC
Ghana	CC	41	CC
Malawi	CC	41	CC
Niger	CC	<b>4</b> ▶	CC
Cameroon	CCC	▼	CC
Gabon	CC	41	CC
Togo	С	<b>A</b>	CC
Cape Verde	С	_	CC
Guinea	С	<b>4</b> ▶	С
Zimbabwe	CC	▼	С
Congo, Democratic Republic of	С	4▶	С
Guinea-Bissau	CC	▼	С
Chad	CC	▼	С
Somalia**			С
Mauritania	CC	▼	С
Sudan	CC	▼	С
Congo	CC	▼	С
Burundi	CC	▼	С
Equatorial Guinea	D	<b>4</b> ▶	D
Central African Republic	С	•	D
Eritrea	D	<b>4</b> ▶	D
Libya**			D
Seychelles***			

<sup>\*</sup>Countries that scored -1 on a negative indicator could not score above a BBB rating

<sup>\*\*</sup>Not rated in 2016 Global Slavery Index

<sup>\*\*\*</sup>Included for the first time in 2018, therefore a rating is not provided. All data are available via the Global Slavery Index website

While the Africa region has the lowest average regional government response score, with a CC rating, there have been significant improvements in specific countries and a trend to strengthen modern slavery legislation. Six countries have passed strengthened trafficking legislation since 2016, most recently in Côte d'Ivoire and Morocco.

There are also multiple regional bodies in Africa that have been proactive in responding to modern slavery, which points to increasing opportunities to hold governments to account. Despite this, limited resources and ongoing conflict continue to hinder more comprehensive responses to modern slavery in the Africa region.

TABLE 6
Government response rating, milestone percentage, and total score by country, Africa

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
В	South Africa	53.7	61.7	43.8	57.1	0.0	47.4
В	Senegal	49.6	43.9	56.3	54.8	0.0	47.1
В	Sierra Leone	53.7	37.8	50.0	54.8	0.0	46.2
В	Nigeria	58.9	53.3	50.0	47.6	0.0	45.8
В	Tunisia	53.0	31.7	43.8	57.1	0.0	44.3
В	Côte d'Ivoire	34.4	36.7	43.8	66.7	8.3	42.4
В	Uganda	48.1	51.7	37.5	54.8	0.0	42.0
В	Mozambique	57.6	49.4	31.3	42.9	0.0	40.7
В	Egypt	37.6	30.6	62.5	64.3	0.0	40.1
CCC	Lesotho	35.9	37.2	56.3	42.9	0.0	38.3
CCC	Benin	30.6	31.7	56.3	52.4	0.0	37.7
CCC	Morocco	6.5	56.7	31.3	71.4	0.0	36.5
CCC	Kenya	35.7	38.9	37.5	59.5	0.0	36.5
CCC	Algeria	29.4	47.2	37.5	45.2	0.0	36.3
CCC	Ethiopia	27.8	51.1	56.3	47.6	0.0	36.3
CCC	Burkina Faso	38.1	30.0	43.8	42.9	0.0	35.7
CCC	Djibouti	30.4	42.8	31.3	47.6	0.0	35.3
CCC	Mauritius	43.7	38.9	0.0	50.0	0.0	34.9
CCC	Gambia	25.0	48.3	37.5	40.5	0.0	33.9
CCC	Rwanda	36.9	41.7	43.8	54.8	0.0	33.6
CCC	Namibia	34.1	27.8	18.8	54.8	0.0	33.3
CCC	Botswana	32.2	45.6	37.5	45.2	0.0	33.2
CCC	Tanzania, United Republic of	37.2	41.7	25.0	47.6	0.0	32.8
CCC	Madagascar	38.7	52.8	18.8	50.0	0.0	31.8
CCC	Zambia	33.3	34.4	25.0	40.5	0.0	31.8
CCC	Liberia	28.0	26.7	31.3	50.0	0.0	31.7
CCC	Mali	38.9	35.6	50.0	28.6	0.0	30.8
CC	Angola	31.5	13.9	43.8	54.8	0.0	29.5
CC	Swaziland	36.3	18.3	37.5	47.6	0.0	29.3
CC	Ghana	24.8	33.3	37.5	40.5	8.3	27.6
CC	Malawi	33.1	23.9	43.8	33.3	0.0	26.8
CC	Niger	29.1	35.6	25.0	35.7	0.0	25.9
CC	Cameroon	26.7	24.4	18.8	50.0	0.0	25.4
CC	Gabon	27.8	11.7	31.3	33.3	0.0	24.2
CC	Togo	28.7	21.1	31.3	21.4	0.0	23.6
CC	Cape Verde	23.5	16.1	25.0	33.3	0.0	22.9
С	Guinea	8.7	10.6	37.5	50.0	0.0	19.3
С	Zimbabwe	11.7	17.2	43.8	35.7	0.0	19.0
С	Congo, Democratic Republic of the	25.9	24.4	37.5	14.3	0.0	18.9

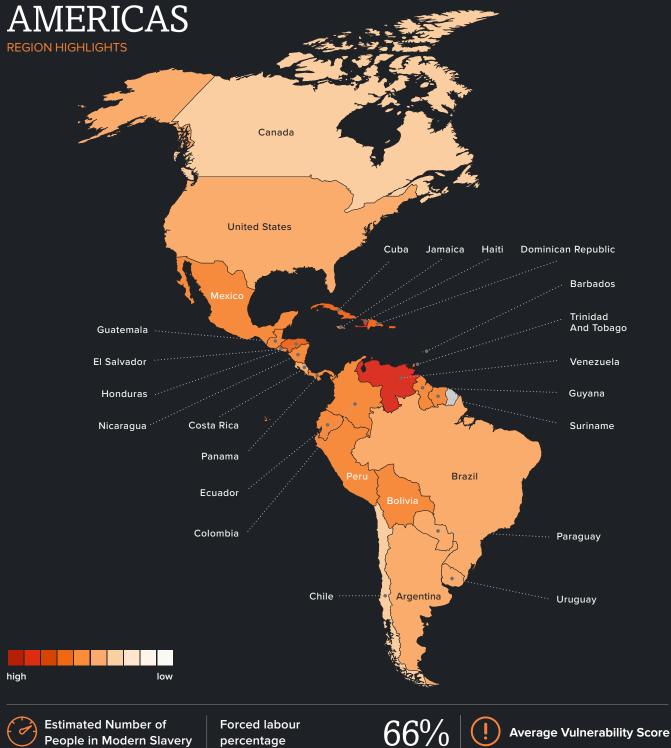
Table 6 continued.

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
С	Guinea-Bissau	7.4	31.1	31.3	21.4	0.0	18.9
С	Chad	16.7	13.9	12.5	40.5	0.0	16.7
С	Somalia	8.1	20.6	25.0	35.7	0.0	16.0
С	Mauritania	6.5	25.0	18.8	35.7	0.0	15.5
С	Sudan	2.8	26.7	25.0	33.3	0.0	14.9
С	Congo	8.3	6.7	25.0	42.9	0.0	14.8
С	Burundi	22.2	11.1	12.5	26.2	0.0	10.7
D	Equatorial Guinea	3.7	12.2	12.5	26.2	0.0	8.6
D	Central African Republic	-3.7	0.6	12.5	21.4	0.0	2.5
D	Eritrea	0.0	-1.1	0.0	21.4	0.0	-2.0
D	Libya	0.0	21.7	0.0	0.0	0.0	-2.5
No rating	Seychelles <sup>3</sup>						

Migrants are seen at a detention centre in Zawiyah, 45 kilometres west of the Libyan capital Tripoli, in June, 2017. The Libyan coastguard has rescued more than 900 African and Asian migrants attempting to reach Europe, a navy spokesman said. These detention centres have been used as staging posts for human trafficking.

Photo credit: Taha Jawashi/AFP/Getty Images





People in Modern Slavery

percentage

1,950,000

Regional Proportion of Global Estimate

Forced marriage percentage



5%

Average Government Response Score

BB CCC CC **BBB** D ••••

With 35 countries and 13 percent of the world's population, the Americas is home to geographically large countries such as Brazil, Argentina, Canada, and the United States and features wide socio-economic differences within each country and across the region. This regional study summarises a longer set of findings, which can be found in the *Global Slavery Index: Americas Report*.

### Prevalence within the Americas

On any given day in 2016, an estimated 1.9 million men, women, and children were living in modern slavery in the Americas. This region had a prevalence of 1.9 people in modern slavery for every 1,000 people in the region.

When considering the forms of modern slavery, the rate of forced labour (1.3 victims per 1,000 people) was higher than the rate of forced marriage (0.7 victims per 1,000). A little over a third of victims of forced labour exploitation were held in debt bondage (37.9 percent), with similar proportions of men and women in the region trapped through debt.

The region also accounted for four percent of all victims of forced sexual exploitation worldwide.

Within the region, Venezuela, Haiti, and the Dominican Republic were the countries with the highest prevalence of modern slavery; however, the United States, Brazil, and Mexico had the highest absolute numbers and accounted for over half (57 percent) of the victims in the region.

These regional figures, while important, should be interpreted cautiously given the gaps and limitations of data in key regions. For example, there are no surveys conducted in North America.

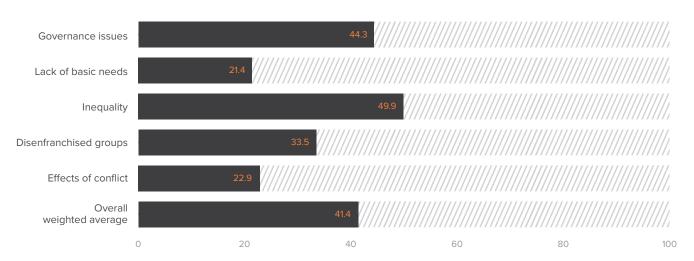
TABLE 7
Estimated prevalence of modern slavery by country, Americas

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
1	Venezuela, Bolivarian Republic of	5.6	174,000	31,155,000
2	Haiti	5.6	59,000	10,711,000
3	Dominican Republic	4.0	42,000	10,528,000
4	Cuba	3.8	43,000	11,461,000
5	Honduras	3.4	30,000	8,961,000
6	Trinidad and Tobago	3.0	4,000	1,360,000
7	Guatemala	2.9	47,000	16,252,000
8	Nicaragua	2.9	18,000	6,082,000
9	Barbados	2.7	1,000	284,000
10	Colombia	2.7	131,000	48,229,000
11	Mexico	2.7	341,000	125,891,000
12	Guyana	2.6	2,000	769,000
13	Jamaica	2.6	7,000	2,872,000
14	Peru	2.6	80,000	31,377,000
15	El Salvador	2.5	16,000	6,312,000
16	Ecuador	2.4	39,000	16,144,000
17	Suriname	2.3	1,000	553,000

			Estimated prevalence		Table 7 continued.
	Regional rank	Country	(victims per 1,000 population)	Estimated absolute number of victims	Population
	18	Bolivia, Plurinational State of	2.1	23,000	10,725,000
	19	Panama	2.1	8,000	3,969,000
	20	Brazil	1.8	369,000	205,962,000
	21	Paraguay	1.6	11,000	6,639,000
	22	Argentina	1.3	55,000	43,418,000
	23	United States	1.3	403,000	319,929,000
	24	Costa Rica	1.3	6,000	4,808,000
	25	Uruguay	1.0	4,000	3,432,000
	26	Chile	0.8	14,000	17,763,000
	27	Canada	0.5	17,000	35,950,000

### Vulnerability within the Americas

FIGURE 5
Regional average vulnerability scores by dimension, Americas



The average vulnerability score in the Americas (41 percent) suggests a higher risk of modern slavery in this region than is evident in the prevalence data. The Americas region performed relatively well on the dimensions that measure impact of conflict and acceptance of minority groups, with a better average score than other regions, but relatively poorly on the governance and the inequality dimensions, which can reflect increasing income inequality, significant problems associated with violent crime, and lower confidence in judicial systems (Figure 5). Across all dimensions of vulnerability, scores in the region ranged from a high of 70 percent in Haiti to a low of 10 percent in Canada.

TABLE 8
Estimated vulnerability to modern slavery by country, Americas

Halti	Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
of         65.1         19.7         60.4         34.3         27.8         57.9           Mexico         47.3         23.7         59.0         37.8         68.8         57.3           Honduras         55.5         26.5         58.9         36.5         32.7         55.5           Cuba         60.2         25.9         37.6         47.8         17.3         52.4           Guatemala         51.0         25.8         58.1         40.9         27.4         52.1           Colombia         45.7         19.2         56.4         32.6         63.5         51.6           EI Salvador         50.5         23.0         59.8         43.6         22.7         50.7           Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         <	Haiti	62.4	49.7	54.1	56.8	20.1	69.6
Honduras 55.5 26.5 58.9 36.5 32.7 55.5 Cuba 60.2 25.9 37.6 47.8 17.3 52.4 Guatemala 51.0 25.8 58.1 40.9 27.4 52.1 Colombia 45.7 19.2 56.4 32.6 63.5 51.6 El Salvador 50.5 23.0 59.8 43.6 22.7 50.7 Guyana 49.5 25.6 60.4 28.1 12.4 45.4 Peru 44.3 24.7 48.0 38.2 27.5 44.3 Jamaica 39.5 24.2 62.2 47.8 15.5 44.2 Bolivia, Plurinational State of 50.9 25.8 46.3 32.1 13.4 44.1 Nicaragua 48.2 24.5 43.3 35.3 22.8 43.9 Dominican Republic 42.5 28.7 46.1 38.8 21.8 43.1 Suriname 55.5 10.7 50.8 28.1 16.3 42.1 Barbados 47.6 14.3 52.5 47.8 9.2 41.9 Ecuador 46.0 23.0 46.4 29.1 23.0 41.3 Paraguay 38.3 21.0 64.7 32.7 22.7 40.9 Panama 44.2 21.0 42.6 33.1 9.4 36.4 Rigado 39.3 11.4 45.0 23.6 13.4 28.9 Costa Rica 35.2 16.7 40.7 29.4 12.2 28.4 Chile 28.5 13.8 50.0 23.5 20.3 25.6 Uruguay 31.9 13.5 34.3 15.4 9.5 19.7 United States 18.3 18.2 30.3 15.6 28.6 15.9		65.1	19.7	60.4	34.3	27.8	57.9
Cuba         60.2         25.9         37.6         47.8         17.3         52.4           Guatemala         51.0         25.8         58.1         40.9         27.4         52.1           Colombia         45.7         19.2         56.4         32.6         63.5         51.6           El Salvador         50.5         23.0         59.8         43.6         22.7         50.7           Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         1	Mexico	47.3	23.7	59.0	37.8	68.8	57.3
Guatemala         51.0         25.8         58.1         40.9         27.4         52.1           Colombia         45.7         19.2         56.4         32.6         63.5         51.6           El Salvador         50.5         23.0         59.8         43.6         22.7         50.7           Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0 <td< td=""><td>Honduras</td><td>55.5</td><td>26.5</td><td>58.9</td><td>36.5</td><td>32.7</td><td>55.5</td></td<>	Honduras	55.5	26.5	58.9	36.5	32.7	55.5
Colombia         45.7         19.2         56.4         32.6         63.5         51.6           El Salvador         50.5         23.0         59.8         43.6         22.7         50.7           Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0         23.0         46.4         29.1         23.0         41.3           Paraguay         38.3	Cuba	60.2	25.9	37.6	47.8	17.3	52.4
El Salvador         50.5         23.0         59.8         43.6         22.7         50.7           Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0         23.0         46.4         29.1         23.0         41.3           Paraguay         38.3         21.0         64.7         32.7         22.7         40.9           Trinidad and Tobago         38.6	Guatemala	51.0	25.8	58.1	40.9	27.4	52.1
Guyana         49.5         25.6         60.4         28.1         12.4         45.4           Peru         44.3         24.7         48.0         38.2         27.5         44.3           Jamaica         39.5         24.2         62.2         47.8         15.5         44.2           Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0         23.0         46.4         29.1         23.0         41.3           Paraguay         38.3         21.0         64.7         32.7         22.7         40.9           Trinidad and Tobago         38.6         13.0         62.4         47.8         13.7         39.1           Panama         44.2	Colombia	45.7	19.2	56.4	32.6	63.5	51.6
Peru       44.3       24.7       48.0       38.2       27.5       44.3         Jamaica       39.5       24.2       62.2       47.8       15.5       44.2         Bolivia, Plurinational State of       50.9       25.8       46.3       32.1       13.4       44.1         Nicaragua       48.2       24.5       43.3       35.3       22.8       43.9         Dominican Republic       42.5       28.7       46.1       38.8       21.8       43.1         Suriname       55.5       10.7       50.8       28.1       16.3       42.1         Barbados       47.6       14.3       52.5       47.8       9.2       41.9         Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       3	El Salvador	50.5	23.0	59.8	43.6	22.7	50.7
Jamaica       39.5       24.2       62.2       47.8       15.5       44.2         Bolivia, Plurinational State of       50.9       25.8       46.3       32.1       13.4       44.1         Nicaragua       48.2       24.5       43.3       35.3       22.8       43.9         Dominican Republic       42.5       28.7       46.1       38.8       21.8       43.1         Suriname       55.5       10.7       50.8       28.1       16.3       42.1         Barbados       47.6       14.3       52.5       47.8       9.2       41.9         Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica	Guyana	49.5	25.6	60.4	28.1	12.4	45.4
Bolivia, Plurinational State of         50.9         25.8         46.3         32.1         13.4         44.1           Nicaragua         48.2         24.5         43.3         35.3         22.8         43.9           Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0         23.0         46.4         29.1         23.0         41.3           Paraguay         38.3         21.0         64.7         32.7         22.7         40.9           Trinidad and Tobago         38.6         13.0         62.4         47.8         13.7         39.1           Panama         44.2         21.0         42.6         33.1         9.4         36.4           Brazil         43.1         13.6         56.2         19.8         24.0         36.4           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2	Peru	44.3	24.7	48.0	38.2	27.5	44.3
Nicaragua       48.2       24.5       43.3       35.3       22.8       43.9         Dominican Republic       42.5       28.7       46.1       38.8       21.8       43.1         Suriname       55.5       10.7       50.8       28.1       16.3       42.1         Barbados       47.6       14.3       52.5       47.8       9.2       41.9         Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       1	Jamaica	39.5	24.2	62.2	47.8	15.5	44.2
Dominican Republic         42.5         28.7         46.1         38.8         21.8         43.1           Suriname         55.5         10.7         50.8         28.1         16.3         42.1           Barbados         47.6         14.3         52.5         47.8         9.2         41.9           Ecuador         46.0         23.0         46.4         29.1         23.0         41.3           Paraguay         38.3         21.0         64.7         32.7         22.7         40.9           Trinidad and Tobago         38.6         13.0         62.4         47.8         13.7         39.1           Panama         44.2         21.0         42.6         33.1         9.4         36.4           Brazil         43.1         13.6         56.2         19.8         24.0         36.4           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Uruguay         31.9         13.5	Bolivia, Plurinational State of	50.9	25.8	46.3	32.1	13.4	44.1
Suriname       55.5       10.7       50.8       28.1       16.3       42.1         Barbados       47.6       14.3       52.5       47.8       9.2       41.9         Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Nicaragua	48.2	24.5	43.3	35.3	22.8	43.9
Barbados       47.6       14.3       52.5       47.8       9.2       41.9         Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Dominican Republic	42.5	28.7	46.1	38.8	21.8	43.1
Ecuador       46.0       23.0       46.4       29.1       23.0       41.3         Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Suriname	55.5	10.7	50.8	28.1	16.3	42.1
Paraguay       38.3       21.0       64.7       32.7       22.7       40.9         Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Barbados	47.6	14.3	52.5	47.8	9.2	41.9
Trinidad and Tobago       38.6       13.0       62.4       47.8       13.7       39.1         Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Ecuador	46.0	23.0	46.4	29.1	23.0	41.3
Panama       44.2       21.0       42.6       33.1       9.4       36.4         Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Paraguay	38.3	21.0	64.7	32.7	22.7	40.9
Brazil       43.1       13.6       56.2       19.8       24.0       36.4         Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Trinidad and Tobago	38.6	13.0	62.4	47.8	13.7	39.1
Argentina       39.3       11.4       45.0       23.6       13.4       28.9         Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Panama	44.2	21.0	42.6	33.1	9.4	36.4
Costa Rica       35.2       16.7       40.7       29.4       12.2       28.4         Chile       28.5       13.8       50.0       23.5       20.3       25.6         Uruguay       31.9       13.5       34.3       15.4       9.5       19.7         United States       18.3       18.2       30.3       15.6       28.6       15.9	Brazil	43.1	13.6	56.2	19.8	24.0	36.4
Chile     28.5     13.8     50.0     23.5     20.3     25.6       Uruguay     31.9     13.5     34.3     15.4     9.5     19.7       United States     18.3     18.2     30.3     15.6     28.6     15.9	Argentina	39.3	11.4	45.0	23.6	13.4	28.9
Uruguay     31.9     13.5     34.3     15.4     9.5     19.7       United States     18.3     18.2     30.3     15.6     28.6     15.9	Costa Rica	35.2	16.7	40.7	29.4	12.2	28.4
United States         18.3         18.2         30.3         15.6         28.6         15.9	Chile	28.5	13.8	50.0	23.5	20.3	25.6
	Uruguay	31.9	13.5	34.3	15.4	9.5	19.7
Canada         16.6         20.7         20.1         9.2         21.5         10.2	United States	18.3	18.2	30.3	15.6	28.6	15.9
	Canada	16.6	20.7	20.1	9.2	21.5	10.2

## Government responses within the Americas

Governments in the Americas have taken strong steps to respond to modern slavery, with improvements in victim identification mechanisms and support services. The Americas scores an average B rating, with countries such as Chile, Argentina, and Peru strengthening their national referral mechanisms and guidelines for identifying victims in recent years. Certain countries within the Americas, namely the US and Brazil, also lead the way globally on engaging with business. Brazil has been engaging with business to prevent *trabalho escravo* (slave labour) since 2005 with the launch of its National Pact for the Eradication of Slave Labour, a multi-stakeholder initiative to engage national and international companies to maintain supply chains free from slave labour.

TABLE 9
Movements in the rating for the Americas 2016 to 2018

Country	2016 Rating	Change in rating	2018 Rating
United States	BBB*	4▶	BBB*
Argentina	BB	<b>A</b>	BBB
Chile	В	_	BBB
Canada	BB	41	ВВ
Jamaica	BB	41	ВВ
Dominican Republic	ВВ	41	ВВ
Brazil	ВВ	4▶	ВВ
Peru	В	<b>A</b>	ВВ
Mexico	ВВ	4▶	ВВ
Uruguay	В	<b>A</b>	ВВ
Costa Rica	ВВ	4▶	ВВ
Trinidad and Tobago	CCC	<b>A</b>	В
Ecuador	В	4▶	В
Nicaragua	В	4▶	В
Guatemala	В	4▶	В
Panama	CCC	_	В
Bolivia, Plurinational State of	CCC	<b>A</b>	В
Colombia	В	<b>4</b> ▶	В
Paraguay	В	4▶	В
Haiti	CCC	<b>4</b> ▶	CCC
Barbados	CCC	<b>4</b> ▶	CCC
El Salvador	CCC	<b>4</b> ▶	CCC
Honduras	CCC	<b>♦</b> ▶	CCC
Guyana	CCC	4▶	CCC
Venezuela, Bolivarian Republic of	CC	4	CC
Suriname	CC	41	CC
Cuba	CC	41	CC

Antigua and Barbuda, Bahamas, Belize, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines\*\*\*

<sup>\*</sup>Countries that scored -1 on a negative indicator could not score above a BBB rating

<sup>\*\*</sup>Not rated in 2016 Global Slavery Index

<sup>\*\*\*</sup>Included for the first time in 2018, therefore a rating is not provided. All data are still available via the Global Slavery Index website

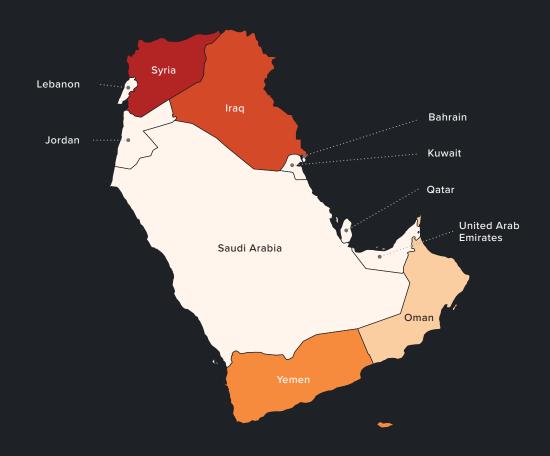
TABLE 10
Government response rating, milestone percentage, and total score by country, Americas

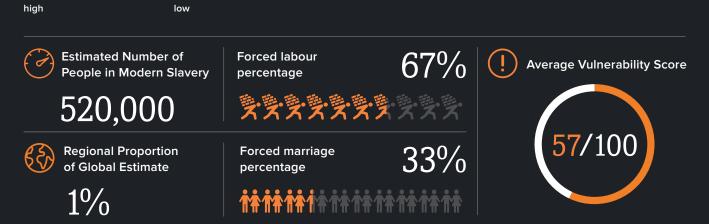
Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
BBB*	United States	92.6	75.6	56.3	66.7	65.0	71.7
BBB	Argentina	70.0	70.6	62.5	78.6	0.0	62.6
BBB	Chile	76.5	53.9	50.0	76.2	0.0	62.3
BB	Canada	52.4	72.8	75.0	61.9	0.0	58.6
BB	Jamaica	50.6	72.8	75.0	64.3	0.0	58.6
BB	Dominican Republic	69.1	78.3	37.5	69.0	0.0	58.0
BB	Brazil	38.9	47.8	87.5	73.8	26.7	55.6
BB	Peru	75.9	42.2	62.5	54.8	0.0	52.5
BB	Mexico	53.7	62.8	56.3	69.0	0.0	52.4
BB	Uruguay	40.6	49.4	50.0	78.6	0.0	50.4
BB	Costa Rica	53.7	41.7	62.5	59.5	0.0	50.0
В	Trinidad and Tobago	67.2	50.0	31.3	66.7	0.0	49.9
В	Ecuador	61.1	55.6	37.5	52.4	0.0	46.4
В	Nicaragua	34.4	70.0	25.0	66.7	0.0	46.3
В	Guatemala	42.2	25.6	62.5	69.0	0.0	45.2
В	Panama	32.6	60.0	31.3	78.6	0.0	43.9
В	Bolivia, Plurinational State of	21.3	43.9	62.5	61.9	8.3	41.3
В	Colombia	40.4	42.2	62.5	69.0	0.0	41.1
В	Paraguay	26.1	56.7	37.5	71.4	10.0	40.9
CCC	Haiti	49.6	42.8	18.8	47.6	0.0	39.7
CCC	Barbados	53.3	26.1	37.5	45.2	0.0	39.4
CCC	El Salvador	31.7	39.4	43.8	64.3	0.0	37.4
CCC	Honduras	27.6	25.6	62.5	54.8	0.0	37.0
CCC	Guyana	33.1	44.4	25.0	45.2	0.0	31.5
CC	Venezuela, Bolivarian Republic of	23.3	43.9	12.5	52.4	0.0	28.2
CC	Suriname	24.3	5.6	31.3	54.8	0.0	27.1
CC	Cuba	13.0	15.0	18.8	42.9	0.0	20.8
No rating	Antigua and Barbuda, Bahamas Saint Vincent and the Grenading		a, Grenada, Sai	nt Kitts and Nevi	s, Saint Lucia,		

\*Indicates where a country could not score above a BBB. These countries have received a negative rating for policies that hinder their response to modern slavery.

## **ARAB STATES**

**REGION HIGHLIGHTS** 





Average Government Response Score

AAA

AA

A

BBB

BB

В

CCC

CC

C

D

••••

The Arab States region covers 11 countries including Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen, and is home to two percent of the world's population. The region is diverse, spanning the wealthier Gulf Cooperation Council (GCC countries) and countries such as Jordan, Lebanon, and Iraq, which are dealing with the impact of ongoing conflict in Syria. This regional study summarises a longer set of findings, which can be found in the *Global Slavery Index: Arab States Report*.

#### Prevalence within the Arab States

On any given day in 2016, an estimated 520,000 men, women, and children were living in modern slavery in the Arab States. This is a prevalence of 3.3 victims per 1,000 persons. When considering the forms of modern slavery, the largest share of those in modern slavery were victims of forced labour (2.2 victims per 1,000 people), while the rate of forced marriage was 1.1 victims per 1,000 people.

Over half of all victims of forced labour exploitation (51 percent) were held in debt bondage and this affected a greater share of female victims than male victims. The Arab States accounted for one percent of victims of forced sexual exploitation globally.

Within the region, Syria, Iraq, and Yemen had both the highest prevalence of modern slavery and the highest absolute number of victims, accounting for 76 percent of the victims in the region.

These regional figures, while important, should be interpreted cautiously given the gaps and limitations of data

in this region. Only two national surveys were conducted in the Arab States region (Lebanon and Jordan), both conducted in Arabic, and none were conducted in the Gulf Cooperation Council (GCC) states, despite the incidence of forced labour reported by various sources in such sectors as domestic work and construction in the GCC countries. The regional estimates for the Arab States were therefore built mainly from respondents who were interviewed in their country of residence and reported about their forced labour situation while working in that region. Further, measurement of forced marriage among residents of countries within the region is particularly problematic where there are no surveys. Taken together, these gaps point to the likelihood of a significant underestimation of the extent of modern slavery in this region.

Similarly, as it is typically not possible to survey in countries that are experiencing profound and current conflict, such as Syria, Iraq, and Yemen, data from these states are likely to understate the problem.<sup>5</sup>

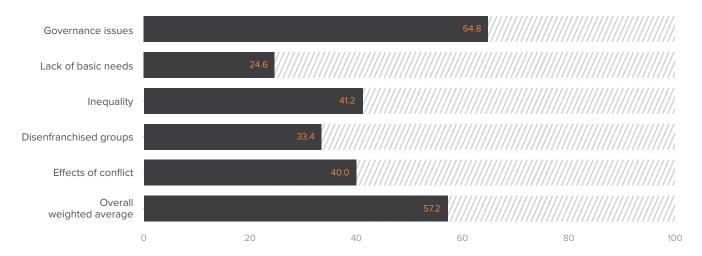
TABLE 11
Estimated prevalence of modern slavery by country, Arab States<sup>6</sup>

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
1	Syrian Arab Republic*	7.3	136,000	18,735,000
2	Iraq*	4.8	174,000	36,116,000
3	Yemen*	3.1	85,000	26,916,000
4	Oman*	2.1	9,000	4,200,000
5	Saudi Arabia*	1.9	61,000	31,557,000
6	Bahrain*	1.9	3,000	1,372,000
7	Jordan*	1.8	17,000	9,159,000
8	Lebanon*	1.7	10,000	5,851,000
9	United Arab Emirates*	1.7	15,000	9,154,000
10	Qatar*	1.5	4,000	2,482,000
11	Kuwait*	1.5	6,000	3,936,000

<sup>\*</sup>Substantial gaps in data exist for the Arab States region and Gulf countries in particular. These gaps point to a significant underestimate of the extent of modern slavery in this region. As a result, the country-level estimates presented here are considered very conservative and should be interpreted cautiously.

## Vulnerability within the Arab States

FIGURE 6
Regional average vulnerability scores by dimension, Arab States



A regional analysis of our vulnerability measures suggests higher risk of modern slavery in the Arab States than is evident in the prevalence data, with the Arab States rating as the second most vulnerable region (57 percent). The Arab States region performed relatively well on the lack of basic needs dimension of the vulnerability model, but relatively poorly on the governance and effects of conflict dimensions (Figure 6). The regional score in the conflict dimension hides diversity within the region, with some

countries such as Yemen, Syria, and Iraq scoring much higher on this dimension than other countries in the region. The regional average on measures of inequality points to slightly higher vulnerability than the global average on this dimension (41 percent *cf* 38 percent) and, again, there is a great deal of diversity within the region, with scores ranging from a low of 25 percent in UAE to a high of 65 percent in Iraq. Across all dimensions of vulnerability, the highest score was found in Syria (92 percent).

TABLE 12
Estimated vulnerability to modern slavery by country, Arab States

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Syrian Arab Republic	85.6	36.9	62.5	33.4	95.4	92.3
Yemen	79.2	43.1	49.2	53.0	69.9	86.4
Iraq	72.6	34.9	65.2	46.6	89.4	85.7
Lebanon	59.1	22.6	48.1	44.8	47.8	58.9
Oman	68.7	20.5	37.8	33.4	6.4	50.1
Jordan	57.9	15.7	41.8	47.4	26.2	49.9
Bahrain	63.0	25.8	34.5	24.0	25.4	49.6
Saudi Arabia	63.2	21.9	30.1	14.2	32.2	46.3
Kuwait	59.7	20.1	29.3	29.3	28.5	45.9
Qatar	56.3	13.8	29.5	33.4	7.0	37.7
United Arab Emirates	47.9	15.1	24.7	7.8	11.9	26.8

## Government responses within the Arab States

The Arab States region scores an average CCC rating on government response. This is despite its relatively high GDP (PPP) per capita in the GCC countries. As a wealthy subregion, the GCC States average CCC rating reveals limited protections for migrant populations most vulnerable to modern slavery. Unlike Asia Pacific (also averaging CCC), the more stable governments in this region which might be expected to act, have taken very few steps to protect the rights and safety of the millions of migrant workers who make up their construction and domestic work sectors. Other countries in the region, such as Jordan and Lebanon, have put in place some protections for migrant populations, but struggle to deal with ongoing conflict in Syria and Yemen, and the flow of people fleeing these crises.

TABLE 13

Movements in government response rating for the Arab States 2016 to 2018

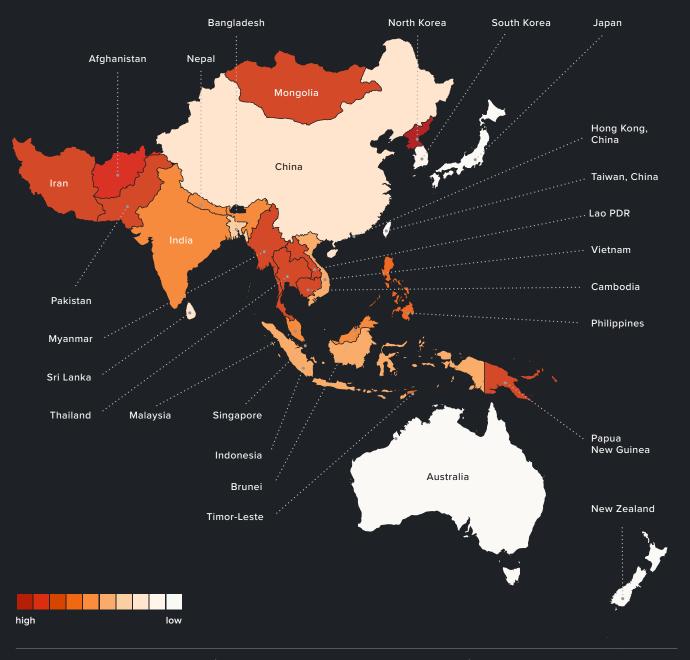
Country	2016 Rating	Change in rating	2018 Rating
United Arab Emirates	В	41	В
Jordan	В	•	CCC
Qatar	CCC	41	CCC
Bahrain	CCC	41	CCC
Oman	CCC	41	CCC
Lebanon	CCC	41	CCC
Saudi Arabia	CC	4▶	CC
Kuwait	CC	<b>4</b> ▶	CC

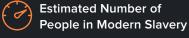
TABLE 14
Government response rating, milestone percentage, and total score by country, Arab States

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
В	United Arab Emirates	63.0	41.1	56.3	42.9	0.0	47.8
CCC	Jordan	48.1	42.8	31.3	38.1	0.0	38.6
CCC	Qatar	53.0	31.7	31.3	42.9	0.0	35.4
CCC	Bahrain	55.2	37.2	18.8	31.0	0.0	32.6
CCC	Oman	32.4	22.8	12.5	59.5	0.0	32.0
CCC	Lebanon	33.9	30.0	31.3	38.1	0.0	31.3
CC	Saudi Arabia	32.4	42.8	37.5	26.2	0.0	27.9
CC	Kuwait	28.7	33.9	25.0	45.2	0.0	27.8

## **ASIA & THE PACIFIC**

**REGION HIGHLIGHTS** 





Forced labour percentage

66%

Average Vulnerability Score

24,990,000

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**(**3)

Regional Proportion of Global Estimate

62%

\*\*\*\*

Forced marriage percentage 34%



m

Average Government Response Score

D 0

AAA

AA

Α

BBB

BB

В

CCC

CC

С

D

••••

With 36 countries and 56 percent of the world's population, the Asia and the Pacific is the world's largest region and is broadly diverse in terms of ethnicity, culture, religion, and development. This regional study summarises a longer set of findings, which can be found in the *Global Slavery Index: Asia and the Pacific Report*.

## Prevalence with in Asia and the Pacific

On any given day in 2016, an estimated 24.9 million men, women, and children were living in modern slavery in Asia and the Pacific. The region had the second highest prevalence of modern slavery in the world with 6.1 per 1,000 people.

When considering forms of modern slavery, the Asia and Pacific region had a high prevalence of forced labour (4.0 per 1,000 people) compared to other regions. The rate of forced marriage was two victims per 1,000 people.

Over half of all victims of forced labour exploitation (55 percent) were held in debt bondage and this affected male victims more than female victims. The Asia and the Pacific region had the highest number of victims across all forms of modern slavery, accounting for 73 percent of victims of forced sexual exploitation, 68 percent of those forced to work by state authorities, 64 percent of those in

forced labour exploitation, and 42 percent of all those in forced marriages.

Within the region, North Korea, Afghanistan, and Pakistan were the countries with the highest prevalence of modern slavery. India, China, and Pakistan had the highest absolute number of people living in modern slavery and accounted for 60 percent of the victims in the region.

These regional figures, while important, should be interpreted cautiously given the gaps and limitations of data in key regions and subregions. For example, only one national survey was conducted in East Asia (Mongolia), and it is not possible to survey in areas of countries that are experiencing profound and current conflict, such as within parts of Pakistan. The lack of data from these regions experiencing conflict means that modern slavery estimates for conflict-affected countries are likely to understate the problem.<sup>7</sup>

TABLE 15
Estimated prevalence of modern slavery by country, Asia and the Pacific

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
1	Korea, Democratic People's Republic of (North Korea)*	104.6	2,640,000	25,244,000
2	Afghanistan	22.2	749,000	33,736,000
3	Pakistan	16.8	3,186,000	189,381,000
4	Cambodia	16.8	261,000	15,518,000
5	Iran, Islamic Republic of	16.2	1,289,000	79,360,000
6	Mongolia	12.3	37,000	2,977,000
7	Myanmar	11.0	575,000	52,404,000
8	Brunei Darussalam	10.9	5,000	418,000
9	Papua New Guinea	10.3	81,000	7,920,000
10	Lao People's Democratic Republic	9.4	62,000	6,664,000
11	Thailand	8.9	610,000	68,658,000
12	Philippines	7.7	784,000	101,716,000
13	Timor-Leste	7.7	10,000	1,241,000

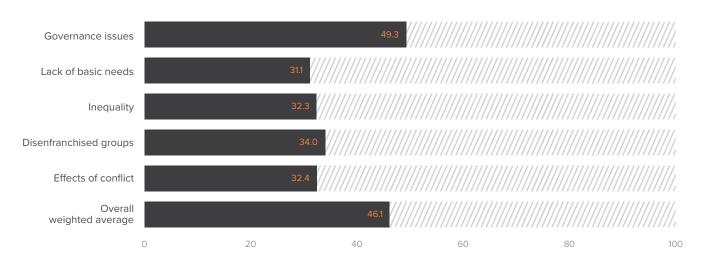
Table 15 continued.

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
14	Malaysia	6.9	212,000	30,723,000
15	India	6.1	7,989,000	1,309,054,000
16	Nepal	6.0	171,000	28,656,000
17	Indonesia	4.7	1,220,000	258,162,000
18	Viet Nam	4.5	421,000	93,572,000
19	Bangladesh	3.7	592,000	161,201,000
20	Singapore*	3.4	19,000	5,535,000
21	China*	2.8	3,864,000	1,397,029,000
22	Sri Lanka	2.1	44,000	20,714,000
23	Korea, Republic of (South Korea)*	1.9	99,000	50,594,000
24	Hong Kong, China*	1.4	10,000	7,246,000
25	Australia	0.6	15,000	23,800,000
26	New Zealand	0.6	3,000	4,615,000
27	Taiwan, China*	0.5	12,000	23,486,000
28	Japan*	0.3	37,000	127,975,000

\*Substantial gaps in data exist for the Central and East Asia subregions where, with the exception of Mongolia, surveys cannot be conducted for reasons such as (i) survey is only delivered face-to-face, (ii) survey is delivered only in the main language which many migrant workers do not speak, or (iii) national authorities would not, or were unlikely to, consent to the module on modern slavery. Unlike several countries in Western Europe where no surveys were conducted, none of the countries in these subregions were identified as sites of exploitation by respondents in the 48 countries where surveys were implemented

## Vulnerability within Asia and the Pacific

FIGURE 7
Regional average vulnerability scores by dimension, Asia and the Pacific



Overall, the Asia and the Pacific region performed relatively well on the conflict dimension of the vulnerability model. Nonetheless, countries with highest prevalence in the region include North Korea, Afghanistan, and Pakistan. North Korea has well documented state-imposed forced labour, and Afghanistan and Pakistan are both impacted by protracted and ongoing conflict. The Asia and the Pacific region scored

relatively poorly on the disenfranchised groups dimension, which perhaps reflects discrimination of individuals on the basis of migration status, race, ethnicity, and/or sexual orientation (Figure 7). A key flash point in the region has been the mass displacement, abductions, sexual violence, and murders committed against the Rohingya population from Myanmar.<sup>8</sup> International organisations have already warned

of the likelihood of sexual enslavement and human trafficking occurring as a result of this crisis. On overall vulnerability,

Afghanistan had the highest levels of vulnerability (94 percent) and New Zealand the lowest (two percent).

TABLE 16
Estimated vulnerability to modern slavery by country, Asia and the Pacific

Country Name	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Afghanistan	81.0	41.3	64.7	46.0	92.6	93.9
Pakistan	56.8	36.2	45.9	55.3	92.8	74.1
Korea, Democratic People's Republic of (North Korea)	87.6	52.0	30.3	32.4	12.3	73.3
Myanmar	58.1	43.8	26.1	46.0	70.2	65.9
Cambodia	66.3	38.5	41.6	56.7	14.8	63.5
Iran, Islamic Republic of	74.6	25.5	35.8	37.3	39.5	63.3
Papua New Guinea	64.8	63.3	46.2	9.5	13.3	61.9
Philippines	50.5	35.3	45.7	36.4	69.3	60.2
Lao People's Democratic Republic	70.7	35.1	26.4	41.2	13.9	57.5
India	46.2	29.8	32.4	41.1	80.0	55.5
Timor-Leste	58.4	41.9	37.2	41.2	3.9	52.8
Thailand	50.9	21.8	35.3	45.1	51.9	51.1
China	61.4	20.5	26.9	32.4	44.2	50.6
Indonesia	43.7	38.0	35.8	53.3	32.2	50.5
Bangladesh	54.1	38.4	25.7	20.9	45.3	50.0
Brunei Darussalam	53.5	30.9	31.7	41.2	18.2	47.2
Nepal	52.0	35.6	32.2	8.7	34.7	44.1
Mongolia	40.9	36.8	35.1	47.1	18.1	43.5
Sri Lanka	44.1	27.0	33.5	34.9	35.9	42.5
Vietnam	53.6	23.2	28.1	32.5	18.5	41.5
Malaysia	36.2	28.4	39.6	41.2	27.8	39.2
Korea, Republic of (South Korea)	33.9	29.4	25.7	33.8	13.4	29.8
Hong Kong, China	39.3	9.6	24.7	28.4	15.0	24.7
Taiwan, China	24.5	24.7	40.6	21.1	1.4	20.3
Japan	21.5	13.1	15.5	31.9	17.8	13.8
Singapore	30.8	16.3	5.0	18.7	9.0	13.4
Australia	11.9	15.7	20.7	12.0	13.0	4.3
New Zealand	12.2	18.4	16.2	7.0	7.0	1.9

## Government responses within Asia and the Pacific

Asia and the Pacific scored an average CCC rating on government response. While this is the same overall rating as given to the Arab States (also averaging CCC), Asia and the Pacific has shown a trend toward improving the safety nets that help to prevent modern slavery for specific groups or sectors. For example, recognising that migrant workers from this region can become vulnerable, there have been attempts to strengthen pre-departure and on-arrival protection for domestic and construction workers from South Asia working in the Arab States, including the use of bilateral labour agreements that include protections. Certain sectors, such as the Southeast Asian fishing industry, have also been in the spotlight in recent years, and while the Thai and Indonesian governments in particular have taken steps to respond to the issue, more remains to be done to reduce the endemic abuse that occurs in the fishing industry.

TABLE 17

Movements in government response rating for Asia and the Pacific 2016 to 2018

Country	2016 Rating	Change in rating	2018 Rating
Australia	BBB	4▶	BBB
New Zealand	ВВ	41	ВВ
Philippines	ВВ	4▶	ВВ
Indonesia	В	_	ВВ
Thailand	В	41	В
Vietnam	В	41	В
India	В	41	В
Bangladesh	В	41	В
Nepal	В	•	CCC
Malaysia	CCC	41	CCC
Taiwan, China	CCC	41	CCC
Cambodia	CCC	41	CCC
Sri Lanka	В	•	CCC
Japan	CCC	41	CCC
Lao People's Democratic Republic	ccc	<b>4</b> Þ	CCC
Singapore	CC	_	CCC
Myanmar	CCC	4▶	CCC
Mongolia	CCC	41	CCC
Timor-Leste	CC	41	CC
Korea, Democratic People's Republic of (North Korea)	СС	41	СС
China	CCC	•	CC
Hong Kong, China	С	_	CC
Brunei Darussalam	С	_	CC
Papua New Guinea	С	4▶	С
Pakistan	CCC	•	С
Iran, Islamic Republic of	D	41	D
Korea, Republic of (South Korea)	D	41	D
Fiji, Kiribati, Nauru, P Tuvalu, Vanuatu***	alau, Samoa, So	lomon Island	ds, Tonga,

<sup>\*</sup>Countries that scored -1 on a negative indicator could not score above a BBB rating

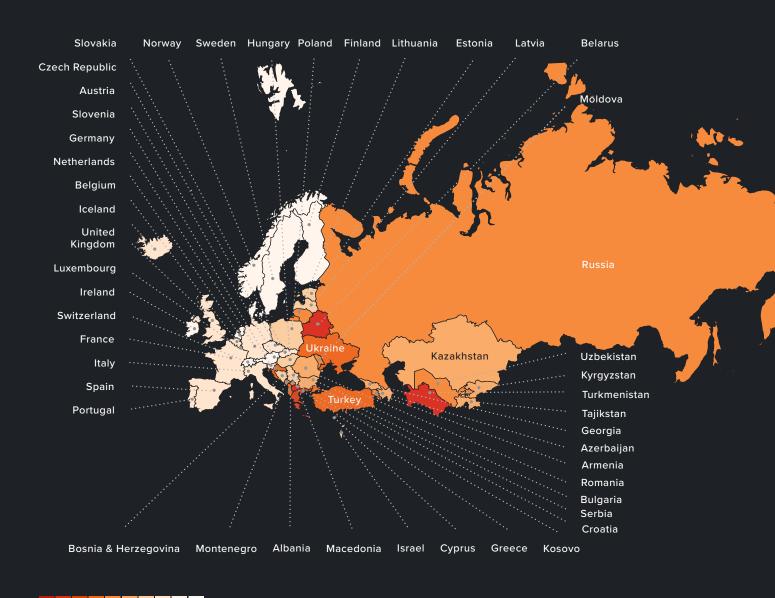
<sup>\*\*</sup>Not rated in 2016 Global Slavery Index

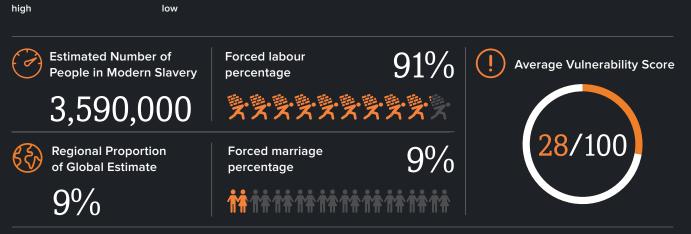
<sup>\*\*\*</sup>Included for the first time in 2018, therefore a rating is not provided. All data are available via the Global Slavery Index website

TABLE 18
Government response rating, milestone percentage, and total score by country, Asia and the Pacific

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
BBB	Australia	69.6	75.0	56.3	69.0	0.0	63.8
BB	New Zealand	53.7	47.8	43.8	95.2	0.0	57.6
BB	Philippines	51.5	69.4	50.0	69.0	0.0	55.8
BB	Indonesia	47.8	60.0	50.0	61.9	0.0	50.8
В	Thailand	46.3	51.7	56.3	73.8	0.0	48.9
В	Vietnam	62.2	45.0	62.5	66.7	0.0	48.1
В	India	46.3	53.3	56.3	45.2	0.0	45.7
В	Bangladesh	43.1	63.3	68.8	42.9	0.0	44.4
CCC	Nepal	35.2	41.7	50.0	59.5	0.0	38.7
CCC	Malaysia	40.0	53.9	56.3	38.1	0.0	38.4
CCC	Taiwan, China	46.9	38.7	25.0	42.9	8.3	38.2
CCC	Cambodia	40.4	46.7	43.8	33.3	0.0	37.6
CCC	Sri Lanka	26.7	42.8	25.0	78.6	0.0	37.4
CCC	Japan	43.5	44.4	37.5	45.2	0.0	36.6
CCC	Lao People's Democratic Republic	38.9	36.7	50.0	40.5	0.0	34.0
CCC	Singapore	40.0	22.2	31.3	42.9	0.0	32.8
CCC	Myanmar	58.0	18.3	43.8	42.9	0.0	32.4
CCC	Mongolia	27.8	33.3	31.3	54.8	0.0	30.7
CC	Timor-Leste	33.1	16.7	25.0	42.9	0.0	28.5
CC	Korea, Republic of (South Korea)	35.9	27.8	12.5	33.3	0.0	27.6
CC	China	23.5	29.4	43.8	52.4	18.3	27.4
CC	Hong Kong, China	30.2	10.0	12.5	31.0	0.0	21.4
CC	Brunei Darussalam	17.8	19.4	0.0	42.9	0.0	20.6
С	Papua New Guinea	26.5	30.6	6.3	26.2	0.0	18.9
С	Pakistan	21.5	15.6	12.5	40.5	0.0	18.6
D	Iran, Islamic Republic of	7.4	9.4	0.0	23.8	0.0	6.8
D	Korea, Democratic People's Republic of (North Korea)	0.0	-6.7	12.5	4.8	0.0	-5.6
No rating	Fiji, Kiribati, Nauru, Palau, Samo	a, Solomon Islan	ds, Tonga, Tuva	alu, Vanuatu <sup>10</sup>			

### **EUROPE & CENTRAL ASIA**





Average Government Response Score

low

BBB

BB

••••

Europe and Central Asia covers 51 countries across the subregions of Central and Western Asia, Eastern Europe and Northern, Southern, and Western Europe. Covering 12.4 percent of the world's population, within these subregions there is broad variation and diversity in terms of people, culture, history, and levels of development. This regional study summarises a longer set of findings, which can be found in the *Global Slavery Index:* Europe and Central Asia Report.

## Prevalence within Europe and Central Asia

On any given day in 2016, an estimated 3.6 million men, women, and children were living in modern slavery in Europe and Central Asia. This region had a prevalence of 3.9 people in modern slavery for every 1,000 people in the region.

When considering the forms of modern slavery, the rate of forced labour (3.6 per 1,000 people) was higher than the rate of forced marriage (0.4 per 1,000 people). The prevalence of forced marriage was the lowest of all the world's regions. A little over a third of victims of forced labour exploitation were held in debt bondage (36 percent), with a higher proportion of men trapped through debt.

The region also accounted for 14 percent of forced sexual exploitation worldwide.

Within the region, Turkmenistan, Belarus, and Macedonia are the countries with the highest prevalence of modern slavery, while Russia, Turkey, and Ukraine have the highest absolute number and account for over one-third (39 percent) of the victims in the region.

These regional figures, while important, should be interpreted cautiously given the gaps and limitations of data in key regions. For example, there are numerous reports of forced marriages in Central Asia but few surveys on the issue have been conducted there. This contributes to lower rates of forced marriage than may be the case in this region.

TABLE 19
Estimated prevalence of modern slavery by country, Europe and Central Asia

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
1	Turkmenistan*	11.2	62,000	5,565,000
2	Belarus	10.9	103,000	9,486,000
3	Macedonia, the former Yugoslav Republic of	8.7	18,000	2,079,000
4	Greece	7.9	89,000	11,218,000
5	Albania	6.9	20,000	2,923,000
6	Turkey	6.5	509,000	78,271,000
7	Ukraine	6.4	286,000	44,658,000
8	Croatia	6.0	25,000	4,236,000
9	Montenegro	5.9	4,000	628,000
10	Lithuania	5.8	17,000	2,932,000
11	Russia	5.5	794,000	143,888,000
12	Moldova, Republic of	5.5	22,000	4,066,000
13	Armenia	5.3	16,000	2,917,000
14	Uzbekistan*	5.2	160,000	30,976,000

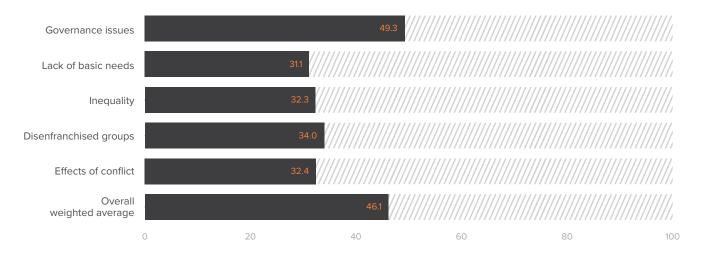
Table 19 continued.

Regional rank	Country	Estimated prevalence (victims per 1,000 population)	Estimated absolute number of victims	Population
15	Tajikistan*	4.5	39,000	8,549,000
16	Bulgaria	4.5	32,000	7,177,000
17	Azerbaijan*	4.5	43,000	9,617,000
18	Georgia	4.3	17,000	3,952,000
19	Romania	4.3	86,000	19,877,000
20	Cyprus	4.2	5,000	1,161,000
21	Kazakhstan*	4.2	75,000	17,750,000
22	Kyrgyzstan*	4.1	24,000	5,865,000
23	Kosovo	4.0	8,000	1,905,000
24	Latvia	3.9	8,000	1,993,000
25	Israel	3.9	31,000	8,065,000
26	Hungary	3.7	36,000	9,784,000
27	Estonia	3.6	5,000	1,315,000
28	Bosnia and Herzegovina	3.4	12,000	3,536,000
29	Poland	3.4	128,000	38,265,000
30	Serbia	3.3	30,000	8,851,000
31	Slovakia	2.9	16,000	5,439,000
32	Czech Republic	2.9	31,000	10,604,000
33	Portugal	2.5	26,000	10,418,000
34	Italy	2.4	145,000	59,504,000
35	Spain	2.3	105,000	46,398,000
36	Slovenia	2.2	5,000	2,075,000
37	Iceland	2.1	<1,000	330,000
38	United Kingdom	2.1	136,000	65,397,000
39	Germany	2.0	167,000	81,708,000
40	Belgium	2.0	23,000	11,288,000
41	France	2.0	129,000	64,457,000
42	Norway	1.8	9,000	5,200,000
43	Netherlands	1.8	30,000	16,938,000
44	Austria	1.7	15,000	8,679,000
45	Switzerland	1.7	14,000	8,320,000
46	Ireland	1.7	8,000	4,700,000
47	Finland	1.7	9,000	5,482,000
48	Denmark	1.6	9,000	5,689,000
49	Sweden	1.6	15,000	9,764,000
50	Luxembourg	1.5	<1,000	567,000

<sup>\*</sup>Substantial gaps in data exist for the Central and East Asia subregions where, with the exception of Mongolia, surveys cannot be conducted for reasons such as (i) survey is only delivered face-to-face, (ii) survey is delivered only in the main language which many migrant workers do not speak, or (iii) national authorities would not, or were unlikely to, consent to the module on modern slavery. Unlike several countries in Western Europe where no surveys were conducted, none of the countries in these subregions were identified as sites of exploitation by respondents in the 48 countries where surveys were implemented.

## Vulnerability within Europe and Central Asia

FIGURE 8
Regional average vulnerability scores by dimension, Europe and Central Asia



Countries in Europe and Central Asia scored consistently well on vulnerability measures across all five dimensions, which reflects the generally higher average GDP per capita for this region. Interestingly, Europe and Central Asia performed relatively poorly on the disenfranchised groups dimension of vulnerability, which may reflect increasing

anxiety over the refugee and migrant crises (Figure 8). On this dimension, scores ranged from a high of 60 percent in Poland to a low of two percent in Iceland. Overall, the highest vulnerability score across all dimensions was in Turkmenistan (58 percent) and the lowest was in Denmark (one percent).

TABLE 20
Estimated vulnerability to modern slavery by country, Europe and Central Asia

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Turkmenistan	80.2	21.5	31.4	32.6	15.9	58.1
Tajikistan	67.4	30.9	32.8	27.8	30.1	55.8
Ukraine	54.0	15.9	46.4	39.0	62.2	54.4
Russia	59.3	13.5	38.6	34.1	51.9	51.6
Turkey	47.0	22.2	47.0	48.6	47.9	51.6
Azerbaijan	60.3	21.2	23.9	35.7	32.5	47.8
Uzbekistan	71.7	20.3	32.6	9.0	18.0	47.5
Belarus	64.9	16.7	23.9	39.4	20.8	47.3
Bosnia and Herzegovina	52.0	16.4	31.7	50.7	34.1	46.4
Macedonia, the former Yugoslav Republic of	48.4	17.4	42.5	50.6	27.3	45.6
Albania	46.0	20.7	44.3	48.4	27.0	45.2
Kosovo	53.1	16.0	39.3	49.7	12.0	43.8
Armenia	51.1	18.9	33.8	46.3	22.1	43.6
Kazakhstan	60.4	14.5	25.1	38.2	19.5	43.3
Kyrgyzstan	49.6	19.7	35.4	42.6	23.2	42.8
Moldova, Republic of	42.0	22.9	35.3	58.3	18.1	41.6
Georgia	41.5	19.3	33.9	43.9	31.4	39.2
Greece	38.5	14.4	36.4	56.0	23.6	37.1

Table 20 continued.

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Israel	35.8	19.1	27.5	48.5	38.6	36.4
Montenegro	39.4	15.0	37.4	50.9	18.3	35.8
Serbia	39.1	15.2	31.6	40.9	27.5	33.9
Romania	35.8	19.5	32.6	52.0	16.1	33.9
Croatia	35.7	20.2	34.1	48.3	12.2	32.7
Bulgaria	33.0	14.7	43.3	44.1	17.4	31.3
Estonia	35.2	13.7	27.4	52.2	12.4	29.2
Italy	31.7	14.4	45.4	31.0	19.3	28.3
Slovakia	29.9	15.1	29.9	51.2	14.2	27.2
Lithuania	29.2	15.4	35.6	46.3	9.7	26.2
Latvia	31.7	15.9	23.8	44.0	10.3	24.6
Poland	24.5	13.7	27.5	59.6	13.6	24.4
Hungary	23.9	14.8	32.9	48.3	15.5	23.6
Slovenia	22.4	16.6	30.6	45.6	6.4	20.1
Cyprus	24.5	16.7	32.6	29.7	10.1	19.1
Czech Republic	25.1	13.9	21.0	37.1	18.2	19.1
France	17.3	15.4	29.4	21.2	28.5	15.3
Belgium	20.0	15.0	29.9	19.3	12.3	13.1
Spain	17.2	18.3	33.5	15.1	14.2	12.8
United Kingdom	15.9	15.6	25.1	12.4	27.8	11.1
Germany	15.9	15.0	22.8	15.7	24.7	10.4
Ireland	17.2	17.0	24.3	10.9	20.1	10.4
Portugal	12.2	15.6	31.7	20.7	9.7	8.5
Luxembourg	17.7	13.7	24.5	12.1	14.3	8.4
Finland	18.6	16.0	15.0	17.8	11.2	8.2
Netherlands	12.8	13.6	26.0	16.0	12.2	6.1
Norway	15.7	17.8	13.1	9.4	10.8	4.5
Sweden	10.2	17.0	17.4	13.0	18.3	4.3
Iceland	20.6	11.7	21.1	4.1	1.8	4.2
Austria	12.6	12.2	18.2	23.5	3.1	3.4
Switzerland	11.6	12.2	15.2	20.1	4.9	1.5
Denmark	8.7	15.3	13.8	15.2	12.5	1.0





A picture taken in 2011 shows irregular migrants from Burkina Faso working in Foggia, southern Italy during the tomato harvest. Workers in the agriculture sector in Italy frequently face exploitative working conditions, ranging from violation of contract provisions through to severe abuse and forced labour. These workers experience forms of exploitation and abuse, including not receiving adequate remuneration and being controlled by middlemen or labour brokers, known as caporali. Rather than being paid a salary, these men can be paid by the hour or by the number of crates they fill (shown in the image). The second option is illegal in Italy, but many migrants choose this means of payment so they may earn more money, up to 40 Euros per day. The standard salary, working 10-12 hours a day, is around 20 Euros. Regardless of salary, these workers then have to pay the caporali for transportation, food, and water.

Photo credit: Alessando Penso

## Government responses within Europe and Central Asia

While there is evident variation at the subregional level, overall the Europe and Central Asia region has the strongest response to modern slavery, scoring an average BB rating. In Europe in particular, governments are generally characterised by high levels of political will and resources. These countries also have multiple regional bodies which hold them to account and monitor their responses. For example, the European Union's proactive approach to tackling modern slavery means that Europe leads the way in engaging with business as well as taking steps to investigate public procurement.

TABLE 21

Movements in government response rating for Europe and Central Asia 2016 to 2018

Country	2016 Rating	Change in rating	2018 Rating
Netherlands	А	41	А
United Kingdom	BBB	41	BBB*
Sweden	BBB	4▶	BBB
Belgium	BBB	41	BBB
Croatia	BBB	41	BBB
Spain	BBB	41	BBB
Norway	BBB	41	BBB
Portugal	BBB	41	BBB
Montenegro	BB	<b>A</b>	BBB
Cyprus	ВВ	<b>A</b>	BBB
Macedonia, the former Yugoslav Republic of	ВВ	•	BBB
Austria	BBB	<b>4</b> ▶	BBB
Georgia	ВВ	_	BBB
Italy	В	<b>A</b>	BBB
Serbia	ВВ	<b>A</b>	BBB
France	ВВ	<b>A</b>	BBB
Latvia	BB	<b>A</b>	BBB
Switzerland	ВВ	<b>A</b>	BBB
Albania	ВВ	41	ВВ
Slovenia	ВВ	41	ВВ
Lithuania	ВВ	41	ВВ
Denmark	ВВ	41	ВВ
Hungary	ВВ	41	ВВ
Finland	ВВ	41	BB
Ireland	ВВ	4▶	ВВ
Germany	ВВ	<b>4</b> ▶	ВВ
Bulgaria	В	_	ВВ

Generally speaking, governments have improved their responses in recent years by taking more steps to strengthen their legislation, provide protective services for victims, establish coordination and accountability mechanisms, and respond to risk. Countries in Central Asia have also taken steps to tackle state-imposed forced labour in recent years, as shown by a reduction in forced labour in Tajikistan and the willingness of the government of Uzbekistan to engage with the ILO.¹² More needs to be done, however, to reduce rates of forced labour in Turkmenistan and Uzbekistan so that their responses prevent mass mobilisation of the population in the annual cotton harvest.

Country	2016 Rating	Change in rating	2018 Rating
Moldova, Republic of	ВВ	4	ВВ
Greece	CCC	<b>A</b>	ВВ
Kosovo	В	<b>A</b>	ВВ
Poland	BB	41	ВВ
Armenia	В	<b>A</b>	ВВ
Slovakia	В	<b>A</b>	ВВ
Ukraine	В	<b>A</b>	ВВ
Czech Republic	BB	41	ВВ
Israel	В	<b>A</b>	ВВ
Estonia	CCC	<b>A</b>	В
Bosnia and Herzegovina	В	41	В
Azerbaijan	CCC	_	В
Turkey	В	<b>4</b> ▶	В
Iceland	В	<b>4</b> ▶	В
Luxembourg	CCC	_	В
Romania	В	<b>4</b> ▶	В
Kyrgyzstan	CCC	<b>A</b>	В
Belarus	CCC	<b>A</b>	В
Tajikistan	CCC	41	CCC
Kazakhstan	CCC	41	CCC
Uzbekistan	CC	<b>A</b>	CCC
Turkmenistan	CC	41	CC
Russia	CC	41	CC
Malta***			

<sup>\*</sup>Countries that scored -1 on a negative indicator could not score above a BBB rating

<sup>\*\*</sup>Not rated in 2016 Global Slavery Index

<sup>\*\*\*</sup>Included for the first time in 2018, therefore a rating is not provided. All data are available via the Global Slavery Index website

TABLE 22
Government response rating, milestone percentage, and total score by country, Europe and Central Asia

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
А	Netherlands	72.2	72.2	75.0	92.9	36.7	75.2
BBB*	United Kingdom	82.0	73.9	62.5	73.8	26.7	71.5
BBB	Sweden	73.1	64.4	81.3	73.8	18.3	68.7
BBB	Belgium	72.2	53.9	87.5	73.8	36.7	68.3
BBB	Croatia	77.0	78.3	56.3	69.0	18.3	68.2
BBB	Spain	79.3	65.6	62.5	73.8	0.0	66.9
BBB	Norway	68.1	82.8	56.3	73.8	10.0	66.8
BBB	Portugal	62.6	69.4	68.8	83.3	8.3	66.3
BBB	Montenegro	79.3	70.0	56.3	61.9	0.0	64.0
BBB	Cyprus	68.1	77.8	56.3	61.9	18.3	63.4
BBB	Macedonia, the former Yugoslav Republic of	70.4	67.2	75.0	61.9	0.0	63.2
BBB	Austria	72.8	61.1	68.8	61.9	18.3	63.1
BBB	Georgia	74.1	63.9	56.3	69.0	0.0	62.8
BBB	Italy	58.3	78.9	50.0	83.3	26.7	62.0
BBB	Serbia	63.9	75.0	56.3	69.0	0.0	61.9
BBB	France	42.4	71.7	93.8	71.4	18.3	61.5
BBB	Latvia	47.0	61.7	93.8	71.4	18.3	60.9
BBB	Switzerland	66.7	60.6	37.5	81.0	0.0	60.0
BB	Albania	72.8	63.3	68.8	66.7	0.0	59.9
BB	Slovenia	60.4	57.8	56.3	73.8	18.3	59.6
BB	Lithuania	46.3	62.8	68.8	78.6	18.3	59.1
ВВ	Denmark	62.6	56.1	50.0	69.0	28.3	58.6
ВВ	Hungary	64.8	47.2	56.3	71.4	18.3	58.2
ВВ	Finland	53.7	49.4	81.3	71.4	8.3	57.9
ВВ	Ireland	65.9	42.2	62.5	69.0	18.3	57.7
BB	Germany	61.7	57.8	56.3	57.1	36.7	57.1
ВВ	Bulgaria	59.8	49.4	56.3	66.7	18.3	55.8
ВВ	Moldova, Republic of	58.5	61.1	62.5	59.5	0.0	55.7
ВВ	Greece	68.5	66.1	43.8	45.2	18.3	55.1
BB	Kosovo	66.7	62.7	37.5	59.5	0.0	54.8
BB	Poland	53.3	42.2	68.8	69.0	8.3	53.9
BB	Armenia	54.6	51.1	56.3	66.7	0.0	53.2
BB	Slovakia	48.7	52.2	62.5	64.3	18.3	53.2
ВВ	Ukraine	65.7	46.1	62.5	66.7	0.0	53.0
BB	Czech Republic	47.0	54.4	81.3	50.0	28.3	52.9
BB	Israel	57.2	56.1	43.8	61.9	0.0	52.1
В	Estonia	41.3	36.1	43.8	81.0	18.3	48.8
В	Bosnia and Herzegovina	60.2	47.8	25.0	76.2	0.0	48.6
В	Azerbaijan	28.0	71.7	62.5	59.5	0.0	48.2
В	Turkey	66.7	57.2	37.5	33.3	0.0	47.4
В	Iceland	48.7	54.4	37.5	52.4	8.3	46.4
В	Luxembourg	47.4	33.9	68.8	50.0	8.3	45.4
В	Romania	53.3	52.2	50.0	42.9	18.3	43.9
В	Kyrgyzstan	33.0	48.3	56.3	61.9	0.0	40.9
В	Belarus	48.9	27.8	37.5	66.7	0.0	40.1
CCC	Tajikistan	38.9	36.1	43.8	40.5	0.0	33.0
CCC	Kazakhstan	42.8	50.0	37.5	26.2	0.0	32.8
CCC	Uzbekistan	30.2	33.9	31.3	64.3	0.0	30.4
СС	Turkmenistan	17.8	40.0	31.3	61.9	0.0	27.1
СС	Russia	17.0	32.2	37.5	40.5	0.0	20.7
No rating	Malta <sup>13</sup>						

\*Indicates where a country could not score above a BBB. These countries have received a negative rating for policies that hinder their response to modern slavery.

# 06 IMPORTING RISK

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A woman shops at a supermarket in the United States. The US Department of Labor list of products produced by forced labour includes consumer goods such as cocoa, sugar and fish from certain countries.

Photo credit: Robert Nickelsberg/Getty Images





### IMPORTING RISK.

G20 countries and import of products at risk of modern slavery

••••

There is a clear, compelling, and urgent need to find solutions to the many complex factors that enable modern slavery to persist. To date, most research on modern slavery has focused on the countries where the exploitation is taking place, which typically are the world's least developed countries and particularly those that are heavily impacted by known risk factors, such as conflict, failure of rule of law, mass displacement, and endemic discrimination. While this focus is important, the realities of global trade and commerce make it inevitable that products generated by modern slavery will travel across borders and into higher income countries where the prevalence of modern slavery is low.

Accordingly, in this chapter we examine the issue of modern slavery not from the perspective of where the crime is perpetrated, but rather from where the products of the crime are sold and consumed, with a specific focus on G20 countries. The resulting analysis presents a stark contrast in terms of both risk and responsibility. As the research in this Index confirms, citizens in G20 countries enjoy relatively low levels of vulnerability to this crime within their borders and many aspects of their government responses to preventing this crime are comparatively strong. Nonetheless, businesses and governments in G20 countries are importing products that are at risk of modern slavery, with hardly any effort being applied by governments to regulate the labour conditions involved in their production.

This chapter draws on research to identify and validate a short list of products at risk of modern slavery, and then maps out the extent to which these products are imported by G20 countries¹. It is important to note that no single product is completely the result of forced labour. However, in the absence of information on the proportion that is tainted, our analysis shows the potential reach of modern slavery into countries considered to have low levels of vulnerability and comparatively strong responses. The methodology behind this research can be found in Appendix 3.

### Why focus on the G20?

The UN Guiding Principles on Business and Human Rights (UNGPs) were the first international reference framework on human rights in the context of business. Adopted by the UN Human Rights Council in 2011, the UNGPs placed on the international agenda the issue of identifying potential adverse impacts on human rights by business activity.<sup>2</sup> The UN Sustainable Development Goals (SDGs) and in particular Target 8.7, which calls for effective measures to end forced labour, modern slavery, and human trafficking, as well as child labour in all its forms,<sup>3</sup> has further contributed to the push within the international community to eradicate modern slavery, including through initiatives and policies to ensure public and business supply chains are free from this crime.

While initiatives like the SDGs apply to all countries, individual countries have different levels of impact and influence on the global economy. The G20 countries collectively account for nearly 80 percent of world trade and about 85 percent of the world's GDP.<sup>4</sup> Two of the G20's member countries, China<sup>5</sup> and the United States (US),<sup>6</sup> are the world's largest exporting and importing economies respectively. While some G20 countries have a focus on modern slavery abroad through their aid programs, it is critical to examine their efforts to address modern slavery through economic and trade measures.

In 2017, G20 leaders committed to fostering human rights due diligence in corporate operations and supply chains in line with internationally recognised standards such as the UNGPs.<sup>7</sup> This includes working toward establishing policy frameworks and National Action Plans on business and human rights to effectively eliminate forced labour, human trafficking, and modern slavery.<sup>8</sup> Given the economic power and influence of the G20, this represents a massive step forward on this issue.

## Understanding the risk imported by G20 countries

There are two important factors to understanding the transfer of risk from source countries to consumer countries. The first is to identify which globally-traded products are likely to be at risk of being produced using modern slavery, and the second is to match them with their trade value. In this analysis, we focus on the at risk products that are imported into G20 countries and their value.

We created a shortlist of 15 products that appeared most frequently in the 2016 US Department of Labor list of goods produced by forced labour.<sup>9</sup> To ensure we were using the most up to date information, we validated every product on

our initial shortlist through our own research (which resulted in some additions and deletions), and supplemented it with our own data on cocoa and fishing (see Appendix 3). This resulted in the products and source countries listed in Figure 1. It is important to note that the quality and level of available information about both the nature of modern slavery and scale of the problem in these sectors varies widely. In some cases, it is heavily affected by the ability of researchers to validate information. For example, the information on modern slavery in cocoa production is based on random sample surveys undertaken in Ghana and Côte d'Ivoire in 2017, so the information is recent. This reflects the fact that the governments of these countries enable and facilitate research. In contrast, the information on the situation in the North Korean coal mines can be obtained only from defectors from that country, which remains entirely shut off from independent research scrutiny. Equally, some of the research points to widescale problems (such as the research on the Thai fishing industry), whereas in other cases it is less clear if problems are widescale or isolated, as there is less information available. For example, information on forced labour in Chinese electronics manufacturing is based mostly on isolated reports of labour abuses in specific companies, as academic and other independent research on forced labour in China is very scarce. The process used to develop the list contained in Figure 1 is written up in Appendix 3, along with the references which identify the products as being at-risk.

#### FIGURE 1

List of products at risk of forced labour by source countries

4

COTTON: Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan



BRICKS: Afghanistan, India, Myanmar, Nepal, Pakistan



GARMENTS - APPAREL & CLOTHING ACCESSORIES: Argentina, Brazil, China, India, Malaysia, Thailand, Vietnam



**CATTLE:** Bolivia, Brazil, Niger, Paraguay **SUGARCANE:** Brazil, Dominican Republic



GOLD: Democratic Republic of the Congo, North Korea, Peru



CARPETS: India, Pakistan

COAL: North Korea, Pakistan



FISH: Ghana, Indonesia, Thailand, Taiwan, South Korea, China, Japan, Russia<sup>10</sup>



RICE: India, Myanmar



**TIMBER:** Brazil, North Korea, Peru



BRAZIL NUTS / CHESTNUTS: Bolivia



COCOA: Côte d'Ivoire, Ghana
DIAMONDS: Angola



ELECTRONICS - LAPTOPS, COMPUTERS, & MOBILE PHONES: China, Malaysia

We then examined trade data for imports<sup>11</sup> into the G20 countries to identify the top five products imported by each country according to US\$ value. The resulting list of top five products across all G20 states includes the following:

- > Cotton
- › Apparel and clothing
- accessories
  > Cattle
- > Sugarcane
- > Gold
- › Carpets
- > Coal

- > Fish
- > Rice
- > Timber
- › Cocoa
- > Diamonds
- Laptops, computers, and mobile phones

The results of this research are set out in Appendix 3 and visually presented in the maps at the back of this chapter.

As the 2017 Global Estimates of Modern Slavery have shown, most forced labour exploitation occurs in domestic work, construction, manufacturing, as well as agriculture, forestry, and fishing.<sup>12</sup> The products identified on our list (see Figure 1) overlap with the sectors that the Global Estimates have identified as where most forced labour can be found. The Global Estimates also illustrated that female and male victims of labour exploitation are distributed differently across the various sectors. Whereas male victims were mostly found in the mining, manufacturing, construction, and agriculture sectors, female victims of forced labour exploitation were more likely to be in the accommodation and food services industry, and in domestic work.

### What does the analysis tell us?

G20 countries are importing risk of modern slavery on a massive scale. Collectively, G20 countries are importing US\$354 billion worth of at-risk products annually. This ranges from a minimum of US\$739 million for Argentina, to a maximum of US\$144 billion for the United States. While the strength of the supporting evidence of modern slavery in various products certainly varies, for most products the evidence is clear and compelling. In these cases, it is almost certain that governments and businesses are effectively importing and trading the proceeds of crime. The most clear-cut example of this is the import of coal by China from the Democratic People's Republic of Korea (North Korea). China imports nearly a billion US dollars' worth of coal from North Korea, amounting to around 98 percent of North Korea's total exports of coal.13 The process of digging coal is considered a "3D" or dirty, dangerous, and degrading job in North Korea, and the status of being a coal miner is inherited rather than a choice. In recent interviews conducted with a sample of North Korean defectors,14 one interviewee noted that "in North Korea, if your parents work in the coal mines, so will you." He reported he was not paid for this work and he was not free to leave or quit. He had also never seen or even heard about an employment contract for the work he was doing at the coal mine. This defector also noted that "if you're found unemployed you'll be punished at the labour training camp."

The evidence of widescale abuses in the fishing industry is also mounting. Our analysis of risk in global fisheries suggests that of the top 20 fishing countries (by volume of catch) fish imported from China, Japan, Russia, Spain, South Korea, Taiwan, and Thailand are at risk of modern slavery.15 Our literature review found firm evidence of reported cases of labour abuse or trafficking in the last five years for all these countries except Spain, and for Indonesia as well. Inland fisheries in Ghana, primarily in the Lake Volta region, were found to have a high prevalence of children that were trafficked into forced labour.16 Import data confirm wider-scale imports of fish from the at-risk source countries of China, Ghana, Indonesia, Japan, Russia, South Korea, Taiwan, and Thailand into a range of G20 countries, including Argentina, Australia, Brazil, Canada, China, France, Germany, Indonesia, Italy, Japan, Mexico, Saudi Arabia, South Korea, Russia, the UK, and the US (see Table 3 in Appendix 3).

Cocoa from Côte d'Ivoire and Ghana is another product that may be tainted by modern slavery. Our own random sample surveys conducted in Côte d'Ivoire and Ghana in 2017 identified cases of modern slavery in the cocoa sector in both countries. Ghana and Côte d'Ivoire are the world's two largest cocoa producers and their cocoa is widely traded. Cocoa was identified to be within the top five products by US\$ value for 12 of the 18 G20 countries represented in this chapter.

The government of Brazil has recently been ordered by the Inter-American Court of Human Rights to pay US\$5 million to 128 former farm workers who were enslaved on a Brazilian cattle farm between 1988 and 2000.18 This is only one prominent case among many others in recent years that support the widescale existence of modern slavery in the cattle industry in Brazil. Cattle from Brazil is one of the top five imports of at-risk products in Italy and Russia.

Research into the cotton industry has provided evidence that forced labour is a common phenomenon in some Central Asian countries. In Kazakhstan, migrant workers have been found to be affected by modern slavery during the cotton harvest,19 whereas in Turkmenistan adults from the public and private sectors are forced to pick cotton during the annual harvest and farmers are forced to fulfil state-established cotton production quotas.<sup>20</sup> In Tajikistan, forced labour of adults and children has allegedly decreased over the last few years<sup>21</sup> but may still be an issue.<sup>22</sup> For Uzbekistan, there is more conflicting evidence, with some reports strongly linking the Uzbek cotton industry to forced labour<sup>23</sup> while other evidence provided by the International Labour Organization (ILO) suggests that cotton pickers are mostly recruited voluntarily.<sup>24</sup> Turkey is the one G20 country that imports significant amounts of cotton from those countries. Cotton imports by Turkey total more than US\$200 million from Turkmenistan, more than US\$30 million from Tajikistan, and nearly US\$11 million from Uzbekistan.

Another widely imported product across all G20 states is timber from Brazil. Investigations by *Repórter Brasil*, one of the largest Brazilian NGOs operating in the modern slavery space, has revealed that workers are widely exploited

across the Brazilian timber industry. The investigations also link two US-based companies to timber bought from Brazilian traders that sourced their products from Brazilian sawmills that allegedly used modern slavery.<sup>25</sup> Large quantities of Brazilian timber are imported by Argentina, France, Germany, Japan, Mexico, South Korea, and the US.

The garment and textile industry in India, particularly in Southern India states such as Tamil Nadu, is also grappling with extensive labour exploitation. Garments are one of the most widely traded and most "valuable" product categories identified on our list and are represented in the top five products of every one of the G20 countries. The three countries with the highest-value garment imports from India are the US (US\$3.9 billion), UK (US\$1.9 billion) and Germany (US\$1.4 billion).

Electronic goods from Malaysia are also implicated in modern slavery. Research in 2012 and 2014 into the electronics

sector in Malaysia by the US-based NGO Verité revealed widespread forced labour in the industry.<sup>26</sup> All G20 countries imported electronic goods (laptops, computers, and mobile phones) from Malaysia on an enormous scale, led by China (US\$1.6 billion) and the US (US\$1.5 billion).

By unravelling the trade flows and focusing on products at risk of modern slavery that are imported by the top economies, it becomes clear that even the wealthiest countries have a clear and immediate responsibility for responding to modern slavery both domestically and beyond their borders. Developed economies are exposed to the risk of modern slavery not only when this crime is perpetrated within their national borders but also when that risk is effectively transferred to them via the products they import. Policymakers, businesses, and consumers must become aware of this risk and take responsibility for it.

Aakash, 24, from Nepal, trapped in debt bondage in the electronics industry in Malaysia

"I have to work for three years just to pay off the money I borrowed to get this job. I paid \$1600 to a recruitment agent in Nepal at 48% interest. I feel terrible because of this huge loan. I know our earnings are below the minimum wage, but what can we do about it? If you are sick, they don't care. They don't want to let you return home. If you want to leave before the end of your three year contract you have to pay three months salary. If there was no fine, I'd go home right now."

Photog credit: Pete Pattisson for The Guardian



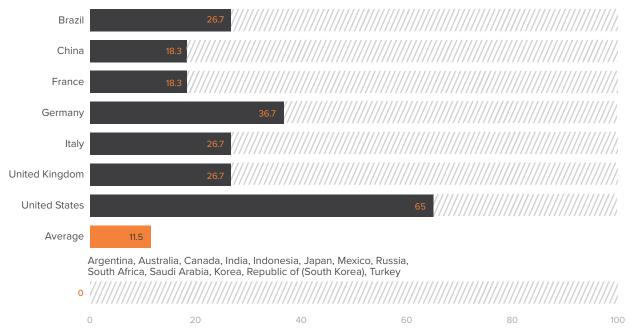


### What are G20 governments doing?

The Global Slavery Index assesses governments on a range of indicators of good practices, including what they are doing to stop the sourcing of goods or services linked to modern slavery (Milestone 5). In terms of results for this milestone in the Government Response Index, G20 countries achieve an average score of 11 percent, reflecting a range of zero (Argentina, Australia, Canada, India, Indonesia, Japan, Mexico, Russia, South Africa, Saudi Arabia, South Korea, and Turkey) to 65 percent (United States) (Figure 2). Australia has announced it will introduce supply chain transparency laws in the second half of 2018.

#### FIGURE 2

Results from Government Response Index to indicators measuring government efforts to stop sourcing goods and services produced by forced labour (Milestone 5, %)



Governments stop sourcing goods and services produced by forced labour (Milestone 5, %)

Brazil. Men work at disembarking loads of cocoa beans and pile these onto a truck at the port of Ilhéus in Bahia, Brazil. The material arriving from the Côte d'Ivoire will be used in the production of chocolate in the factories located in the south of Bahia.

Photo credit: Joá Souza/Brazil Photo Press/ LatinContent/Getty Images Table 1 presents at a glance what governments could or should be doing alongside which policies G20 governments have so far implemented.

Summary of government responses to prevent the sourcing of goods or services linked to modern slavery (Milestone 5)

Policies that governments should be implementing	G20 governments	s which have implemented such policies
IMPORTS		
Policies that prevent the import of goods and services made with forced labour.	United States	Section 307 of the US Tariff Act of 1930.
PUBLIC PROCUREMENT		
Guidelines for public procurement officials to prevent use of modern slavery in public goods.	Germany United States	Guidelines for procurement officials are provided through the "Municipality Compass." Guidelines are available under Executive Order 13627 (2012).
Public procurement policies that explicitly prohibit using businesses suspected of using forced labour / purchasing products that were made using forced labour.	Brazil France Germany Italy United Kingdom United States	"Slave Labour Dirty List" prevents those businesses listed on it from tendering for public contracts.  Ordinance no. 2015-899 of 23 July 2015 relating to public procurement contracts and its implementing Decree no. 2016-360 of 25 March 2016 (transposition of EU Procurement Directive 2014/24/EU).  Part IV of the Restraints of Competition Act (transposition of EU Procurement Directive 2014/24/EU).  Legislative Decree no. 50/2016 (transposition of EU Procurement Directive 2014/24/EU).  Public Contracts Regulations 2015 (England and Wales); Public Contracts (Scotland) Regulations 2015 (transposition of EU Procurement Directive 2014/24/EU).  Executive Order 13627 (2012) and Executive Order 13126 (1999).
Annual reports on government action to prevent use of forced labour in public procurement are produced and publicly available.	None	
Government provides training to public procurement officials on modern slavery.	United States	Training for officials is available under the Executive Order 13627.
Government takes remedial action where forced labour has been discovered.	United States China	The government is fully implementing Section 307 of the US Tariff Act of 1930 which allows the seizure of goods believed to be produced with forced labour.  The government took remedial action when cases of unpaid wages were discovered in public contracts.
BUSINESS SUPPLY CHAINS		
Policies require businesses to report on their actions to minimise risk of forced labour in their supply chain.	Brazil France Germany Italy United Kingdom United States	National Pact for Eradication of Slave Labour (voluntary initiative); "Slave Labour Dirty List" (List Suja do Trabalho Escravo).  Corporate Duty of Vigilance law; Amendments to the Law on Accounting PZE No. 51 (transposition of EU Directive 2014/95/EU).  CSR Directive Implementation Act (transposition of EU Directive 2014/95/EU).  Legislative Decree no. 254, 30 December 2016, (transposition of EU Directive 2014/95/EU).  Section 54, UK Modern Slavery Act 2015.  California Transparency in Supply Chains Act 2010.

Table 1 continued.

Policies that governments should be implementing	G20 governments	which have implemented such policies
Government creates a public list of businesses that have been found to tolerate modern slavery in their supply chains.	Brazil China	"Slave Labour Dirty List" (List Suja do Trabalho Escravo). Measures for Publicising Material Violations of Labour Security; Measures for the Credit Rating Evaluation of Enterprises in Labour Security Compliance (not specific to modern slavery).
Company directors who fail to prevent modern slavery and fail to undertake reasonable due diligence in first tier supply chain can be criminally prosecuted.	None	
OTHER INITIATIVES		
Government identifies risk sectors and takes action to work with these sectors to eradicate modern slavery.	Italy  Germany  United Kingdom  United States	"To work above board" (Campagna informativa "Lavorare alla luce del sole") (agriculture). Textiles Partnership (textiles). Gangmasters and Labour Abuse Authority (agriculture, horticulture, shellfish gathering, and associated packaging). Section 1502 of the Dodd-Frank Act (conflict minerals: gold, tin, tungsten, and tantalum).
Responsible investment reporting requirement for investment funds and banks headquartered in the country to ensure that investments do not support modern slavery.	None	

As Figure 2 and Table 1 show, G20 governments are taking steps in the right direction, but there is still much more work to be done. Among the various potential policy responses to reduce the risk of modern slavery in product supply chains and industries, the following sections will focus on three areas of government responses: (1) imports, (2) procurement: government and business, and (3) ethical recruitment.

### **Imports**

In the US, Section 307 of the Tariff Act of 1930 prohibits the import of goods produced or manufactured, wholly or in part, by forced or child labour.<sup>27</sup> These goods can be prevented from entering the US and can be seized by the federal government. The importing entities can also face criminal investigation.<sup>28</sup> As of November 2017, the US Customs and Border Protection list of Withhold Release Orders, which essentially blocks goods from entering the country under suspicion that they were made with forced labour, contained 42 entries.<sup>29</sup> The US is the only country in the world that has such legislation in place.

While not a government response *per se*, it is relevant to consider the role of sanctions in proscribing certain products for import. In the international arena, the United Nations (UN) has been imposing sanctions on North Korea for several years, with three rounds of sanctions adopted in 2017 by the UN Security Council directed at cutting off revenue to North Korea's military program.<sup>30</sup> The latest UN sanctions passed under Resolution 2397 (2017) imposed restrictions on North Korea's oil, machinery, industrial

equipment, and metals imports as well as on its metal, agricultural, and labour exports.<sup>31</sup> The US government imposed its own sanctions against seven North Korean individuals and three entities over human rights abuses, including forced labour, in October 2017.<sup>32</sup>

The impact of sanctions is often controversial, because even though sanctions are applied to discourage human rights abuses, an unintended side effect can include exacerbating suffering among vulnerable populations.<sup>33</sup> In line with this, it has been noted that the international sanctions imposed on North Korea are further exacerbating the human rights situation in North Korea by impeding the delivery of humanitarian aid to North Koreans in need.<sup>34</sup>

### Public procurement

Public spending significantly contributes to the global economy and the G20 governments can thereby exercise substantial influence over their suppliers and, in turn, over global supply chains. Across OECD countries, public procurement accounts for about 12 percent of GDP on average.<sup>35</sup>Public procurement commitments under the World Trade Organization's Agreement on Public Procurement (GPA) have been estimated at around €1.3 trillion (US\$1.6 trillion).<sup>36</sup> Table 2 details which G20 governments have implemented policies to minimise the risk of governments purchasing products tainted by forced labour.

#### TABLE 2

G20 government responses on public procurement: Status of laws to minimise the risk of modern slavery in public supply chains

Enacted	Not enacted
Brazil	Argentina
France	Australia
Germany	Canada
Italy	China
United Kingdom	India
United States	Indonesia
	Japan
	Mexico
	Russia
	Saudi Arabia
	South Africa
	Korea, Republic of (South Korea)
	Turkey

The US, spending around US\$500 billion in government contracts annually,<sup>37</sup> is leading the field in working toward slavery-free public supply chains. Executive Order 13627 (2012) and Executive Order 13126 (1999) require US government contractors to certify that they and their subcontractors are taking specific preventive measures to detect and eliminate trafficking and forced labour in their supply chains. High-value suppliers are also obliged to create a compliance plan detailing how the supplier

proposes to prevent modern slavery and to certify that no "prohibited" goods or services (including goods produced through modern slavery) are being supplied in order to access government markets.<sup>38</sup> These laws aim to ensure all US government contracts are performed free of human trafficking and forced labour.

In Brazil, the "Dirty List," which publicises companies found to be using modern slavery, is also used by public sector companies and those listed are prevented from tendering for public contracts.<sup>39</sup>

The European Union (EU) has begun moving toward more sustainable and socially responsible public procurement. In 2014, the EU Parliament passed Directive 2014/24/EU to encourage European countries to "buy social" by taking into account social considerations in their public procurement processes, albeit not particularly targeting supply chains.40 Article 57 of Directive 2014/24/EU requires that public authorities exclude a business from the procurement or award procedure if it has been convicted by final judgment for child labour or human trafficking. The Directive also recommends integrating social considerations as part of the contract performance conditions, including asking businesses to comply with the ILO core conventions, such as Convention 29 on forced labour and Convention 182 on worst forms of child labour.41 The requirement of a conviction under these new EU rules sets a high bar, given that human rights abuses in supply chains rarely lead to criminal prosecutions, or are never even reported in the first place.<sup>42</sup> Although the requirements of the public procurement directive are not as far-reaching as legislation, for instance, in the US they nevertheless put pressure on European governments to move toward more ethical and sustainable public procurement. European countries were required to transpose the Directives into national law by 18 April 2016.<sup>43</sup> The names of the domestic legislation and transposition dates by the European members of the G20 are summarised in Table 3.44

TABLE 3
National transposition of EU public procurement Directive 2014/24/EU in European G20 countries

	France	Germany	Italy	United Kingdom
Name of national legislation	Ordinance no. 2015-899 of 23 July 2015 relating to public procurement contracts and its implementing Decree no. 2016-360 of 25 March 2016	Part IV of the Restraints of Competition Act	Legislative Decree no. 50/2016	Public Contracts Regulations 2015 (England and Wales) Public Contracts (Scotland) Regulations 2015
Transposition date	March 2016	April 2016	April 2016	February 2015 (England and Wales) December 2015 (Scotland)



Compulsory collective work consisting of cleaning the railway and picking the coal which fell from a wagon. In North Korea both children and adults are mobilised for unpaid 'communal labour' in agriculture, road building and construction.

Photo credit: Patrick Aventurier/Gamma-Rapho via Getty Images

In 2016, a private members' bill was introduced, among other amendments, into the UK House of Lords by Baroness Young that attempted to extend the reporting requirement in Section 54 of the 2015 Modern Slavery Act to include all public authorities. After this bill was unsuccessful, a similar, second private members' bill was introduced by Baroness Young in mid-2017, however, at the time of writing it has not progressed to a second reading. While these amendments were not passed, it clearly shows there is a desire in the UK to hold government bodies to the same reporting requirements as business.

Germany has also implemented several other measures designed to promote sustainable public procurement. Since 2010, the Alliance for Sustainable Procurement has brought together federal, state, and local authorities to increase the percentage of sustainable goods and services among purchases by public authorities.<sup>47</sup> The Sustainability Compass (Kompass Nachhaltigkeit) is an information platform launched by the federal government to provide information and guidance for German public authorities on how to incorporate social and environmental sustainability criteria into their tendering procedures.<sup>48</sup> Public authorities can exclude economic operators from participating in a tendering process at

any time if they are aware of any mandatory grounds for exclusion which include human trafficking, as defined in Article 2 of EU Directive 2011/36/EU.<sup>49</sup>

In 2013, Australian Prime Minister Julia Gillard announced a new government strategy to revise federal procurement arrangements and guidelines to ensure they assist in identifying and addressing slavery in supply chains.<sup>50</sup> The subsequent Abbott government expressed support for this idea but, to date, it is unclear what action was taken to implement it.51 In March 2017, the Australian government published the new Commonwealth Procurement Rules (CPRs), which replaced the 2014 version.<sup>52</sup> One of the new changes to the 2017 CPRs is Clause 10.18, which requires that officials must make reasonable enquiries to consider the tenderer's practices regarding labour regulations and ethical employment practices.<sup>53</sup> However, the new clause does not specifically mention modern slavery or human trafficking. The final report on Establishing an Australian Modern Slavery Act by the Joint Standing Committee on Foreign Affairs, Defence and Trade recommended introducing a new requirement to ensure the Australian government act as a model leader and procure goods and services only from businesses that comply with the modern slavery reporting requirement.54

### **Business supply chains**

In the past two decades there has been a rapid growth in the number of voluntary initiatives focusing on basic human rights standards and decent working conditions. Typically, they are sector or regionally based, and driven by a variety of stakeholders – governments, civil society, and businesses themselves - and sometimes include certification schemes. However, over the past couple of years there has been a move away from voluntary initiatives toward mandatory reporting laws, such as Section 54 of the UK Modern Slavery Act, which help to create a level playing field for business and ensure that large enterprises are focused on addressing the complex issue of modern slavery in their global supply chains. Table 4 shows which G20 countries have implemented legislation requiring businesses to report on actions they take to eliminate modern slavery from their supply chains.

#### **TABLE 4**

G20 government responses on business supply chain transparency: Status of laws requiring business to report on actions taken to minimise modern slavery risk in supply chains

Enacted	Not enacted
Brazil	Argentina
France	Australia
Germany	Canada
Italy	China
United Kingdom	India
United States	Indonesia
	Japan
	Mexico
	Russia
	Saudi Arabia
	South Africa
	Korea, Republic of (South Korea)
	Turkey

The UK Modern Slavery Act (MSA) has been described as a "game changer" for tackling modern slavery and requiring transparency on modern slavery in supply chains. Section 54 of the MSA requires large businesses to publish an annual statement outlining what they do to ensure there is no slavery within their own organisation or anywhere in their supply chains. While the content of the statement is not mandated, the UK Home Office provides guidance for businesses on the reporting requirement of the MSA, which was updated in October 2017<sup>55</sup> and applies to every British or foreign organisation that does business in the UK and has an annual turnover of more than £36 million

(US\$50.3 million<sup>56</sup>). Failure to disclose a statement could result in injunctive proceedings against the organisation and continued resistance could result in unlimited civil fines. Although the UK is celebrated for its genuine leadership on modern slavery globally, the MSA has also drawn criticism, such as from those who point out that the government has failed to produce a central list of companies that are required to report. This, together with the rather minimal reporting requirements (it is possible to release a statement simply reporting that no action has been taken), makes it difficult to hold companies to account.<sup>57</sup>

The California Transparency in Supply Chains Act (2010), the world's first mandatory reporting law, became effective on 1 January 2012. While California remains the only state in the US to have enacted supply chain transparency legislation, it is itself the world's sixth largest economy, home to influential industries located in Silicon Valley and Hollywood, and accordingly has enormous impact in the US and globally. Businesses covered by the Act must publish on their websites information about the efforts they make to eradicate modern slavery from their direct supply chains for any tangible goods they offer for sale. However, the law applies only to retail sellers and manufacturers (wherever incorporated) that do business in California and have global annual revenues of more than US\$100 million.

In 2017, France adopted the Corporate Duty of Vigilance law requiring mandatory due diligence for large businesses.<sup>61</sup> The law establishes an obligation for parent companies to prepare a "vigilance" or due diligence plan that directly and practically addresses impacts on environment, health and security, and human rights (including modern slavery). The scope of the new law extends to all French companies that have more than 5,000 employees domestically or employ 10,000 employees worldwide. 62 The content of the plan as defined by the law requires detailed mapping of risks, details of procedures used to assess risks with suppliers, alert mechanisms to collect risk information, and a monitoring scheme. Noncompliance with this law may result in court action requiring compliance and/or requiring a business to compensate victims who have suffered as a result of its non-compliance. Initial drafts of the law had proposed civil fines for failure to comply but these were contested and the fines were not included in the final version of the law, as passed. The law will affect about 150 French businesses.63

In February 2017, the Australian Joint Standing Committee on Foreign Affairs, Defence and Trade conducted an inquiry into establishing a Modern Slavery Act in Australia comparable to the UK MSA 2015.<sup>64</sup> In August 2017, the Australian government announced it will introduce legislation that will require large businesses to report annually on their actions taken to address modern slavery.<sup>65</sup> Four months later, the committee released its final report, which recommended legislation that incorporates mandatory supply chain reporting for business as well as a domestic response to modern slavery in Australia, led by an Australian Anti-Slavery Commissioner. Other recommendations included greater regulation of labour hire

companies, measures to tackle orphanage tourism,<sup>66</sup> and modern slavery reporting by the government on its own supply chains.<sup>67</sup> The Australian government has committed to introducing a bill to Parliament by mid-2018 with the aim to pass legislation by end of 2018.<sup>68</sup> Details of the precise content of the bill are not yet known.

In Brazil, the 2005 National Pact for the Eradication of Slave Labour saw signatory companies voluntarily agreeing to actively promote decent work practices

The UK Modern Slavery Act

(MSA) has been described as

a "game changer" for tackling

modern slavery and requiring

transparency on modern

slavery in supply chains.

and to cut commercial ties with those businesses that are on the government's "Slave Labour Dirty List" because they use forced labour in their supply chains. <sup>69</sup> The response to the Pact was positive, with more than 450 companies, representing almost 30 percent <sup>70</sup> of Brazil's GDP, signing onto the Pact by 2014. <sup>71</sup> The "Slave Labour Dirty List" was introduced by the Ministry of Labour and Employment in 2004 to publicly "name

and shame" companies that have been found to be profiting from slave labour. The Companies can also be penalised through criminal and commercial sanctions, such as the freezing of assets or denial of government subsidies. In 2014, the Supreme Court of Brazil suspended the disclosure of the Dirty List following a lawsuit filed by the Associação Brasileira de Incorporadoras Imobiliárias (Abrainc), a real estate developer's association representing many organisations on the list. Abrainc argued the list was unconstitutional as it disrespected the fundamental right to a defence. The court allowed the government to resume publication of the list in March 2017, but since then there

has been criticism about the updating of the list, $^{75}$ as the new version identified only 68 businesses in contrast to the 609 names listed in 2014 before it was enjoined by the court. $^{76}$ 

In 2014, the European Union introduced the EU Directive 2014/95/EU on disclosure of non-financial and diversity information, which requires large businesses to include in management reports a non-financial statement containing information relating to social, environmental, and human rights matters.<sup>77</sup> While modern slavery is not expressly

mentioned, it is effectively captured under the category of human rights. In short, businesses are required to disclose if they have more than 500 employees or are a public interest entity.<sup>78</sup> Twenty-seven EU countries, excluding Spain, have fully transposed the Directive into domestic legislation. It is estimated that the legislation will cover around 6,000 large companies across the EU.<sup>79</sup> Generally, all national laws

require that company reports cover the following topics: environmental performance, social and employee matters, human rights, and corruption and anti-bribery. EU Directives give, however, significant flexibility to member countries when transposing them domestically. Because of this, the requirements included in national legislation vary widely across the EU countries. As is described in Table 5, EU member countries differ in the ways in which they define the size of an organisation, the type of reporting mechanism, and the penalty which will be imposed upon organisations that fail to report.<sup>80</sup>

TABLE 5
Implementation of EU Directive on non-financial reporting in European G20 countries<sup>81</sup>

	France	Germany	Italy	United Kingdom
Name of national legislation	Amendments to the Law on Accounting PZE No. 51	CSR Directive Implementation Act	Legislative Decree no. 254, 30 December 2016	Companies, Partnerships and Groups (Accounts and Non-Financial Reporting) Regulations 2016
Company scope	Business with more than 500 employees net turnover over €40 million or a balance sheet total over €20 million public interest entities non-listed sociétés anonymes and non-listed investment funds if they have a net turnover over €100 million	Business with more than 500 employees net turnover over €40 million or a balance sheet total over €20 million public interest entities	Business with more than 500 employees net turnover over €40 million or a balance sheet total over €20 million public interest entities	Business with more than 500 employees public interest entities
Type of reporting mechanism	Annual report, within 8 months of the end of financial year, made available on website for 5 years	Management report, or separate non-financial report, within 4 months after the balance sheet date	Management report, or separate report within deadline of financial statements, published on company register alongside management report	Strategic report
Penalties	No fine is imposed unless an interested party asks for the disclosure of the non-financial information, if it is not available, financial penalties can be imposed by a judge.	Up to the amount which is the highest of the following: €10 million or five percent of the total annual turnover of the company or twice the amount of the profits gained or losses avoided because of the breach.	Between €20,000 and €150,000	None

It should be noted that several other European countries are developing due diligence regulations. This includes the upcoming Dutch Child Labour Due Diligence Law82 and the latest developments in Switzerland sparked by the Swiss Responsible Business Initiative (RBI), which is seeking an amendment to the Swiss Federal Constitution that would require companies to conduct mandatory human rights diligence in line with the UN Guiding Principles. In response to the RBI, the Legal Affairs Committee of the Swiss Parliament's Council of States announced in late 2017 that a new bill would be drafted that would make human rights due diligence mandatory for all large companies and also for small and medium-sized enterprises operating in high-risk areas. It is expected that the public referendum on this proposed legislative amendment will take place towards the end of 2018 or the beginning of 2019. 83

In a major step forward, the Canadian government announced on 17 January 2018 that it will create an independent Canadian Ombudsman for Responsible Enterprise (CORE). The CORE will be mandated to investigate allegations of human rights abuses linked to Canadian corporate activity abroad and will have the power to independently investigate, report, recommend, and remediate, as well as to monitor implementation of the remedies it imposes. The position's scope will be multisectoral, initially focusing on the mining, oil and gas, and garment sectors, but it is expected that it will be extended to other business sectors. The Canadian government also announced plans to establish an Advisory Board on Responsible Business Conduct to advise the government and the CORE on responsible business conduct abroad.<sup>84</sup>

### Ethical recruitment

Global supply chains entail the buying of goods but also the purchase of labour. In our globalised world, millions of so-called economic migrants are leaving their countries to seek work elsewhere. Remittances from migrant labour contribute strongly to the GDP of many developing countries. For the purpose of preventing and eliminating modern slavery, there needs to be a particular focus of attention on migrant workers, especially those working in the low-skilled, informal, or seasonal sectors as they are generally more vulnerable due to a combination of factors, including linguistic barriers, financial pressure, or limited knowledge of their local rights.<sup>85</sup> Their situation is often exacerbated by the available migration frameworks that

may offer only limited options for safe migration. Many of the issues connected to exploitation of migrant workers are rooted in practices that trap workers in bonded labourtype situations that they are unable to leave. Some of the most fundamental practices increasing the vulnerability of workers assessed under the Global Slavery Index's Government Responses Index include the charging of recruitment fees to workers and the lack of labour law protection for migrant workers and those working in vulnerable sectors. Accordingly, while businesses have a role to play, it is essential that governments take action to improve conditions for migrant workers by enforcing ethical recruitment and labour protections.<sup>86</sup>

TABLE 6
G20 government responses concerning recruitment fees

Laws implemented to prevent fees charged to employee	No federal legislation, individual state laws enacted	Fees capped at certain amounts or according to certain conditions	No laws implemented
Brazil	Canada	Germany	Argentina
Italy	United States	India	Australia
South Africa		Japan	China
United Kingdom			France
			Indonesia
			Mexico
			Russia
			Saudi Arabia
			Korea, Republic of (South Korea)
			Turkey

Table 6 groups the various policy responses of G20 countries on charging of recruitment fees to workers<sup>87</sup> into four different categories. Some countries have legislation prohibiting recruitment fees that are charged to the employee. For example, the UK's Employment Agencies Act 1973, Section 6, prohibits employment agencies from charging recruitment fees to the workers for finding or trying to find them employment.88 Since 2005, the UK has also had a licensing scheme to regulate businesses that provide workers to the agriculture, horticulture, shellfish gathering, and processing and packaging sectors.89 The Gangmasters and Labour Abuse Authority (GLAA, formerly known as the Gangmasters Licensing Authority) is a non-departmental public body that assesses third-party employment agencies to ensure they meet certain standards with regard to workers receiving fair treatment and being legitimately employed.90 In mid-2017, the GLAA's role was broadened to more effectively combat modern slavery across the entire labour market (i.e. including sectors that are not subject to GLAA licensing<sup>91</sup>). GLAA officers now have new police-style powers that allow them to carry out arrests (rather than refer offenders on to the police) and to search for and seize evidence of labour offences. 92

In two G20 countries, Canada and the United States, policies prohibiting recruitment fees charged to the employee exist in certain states and provinces but are not federally legislated.

Another group of G20 countries allows the charging of recruitment fees to the employee but caps the amount according to certain conditions. For example, in Germany, paragraph 296 of the German Social Code of Law (Sozialgesetzbuch) states that when using a private recruitment agency, the job seeker enters into a contract with the agency. If the agency finds employment for the job seeker, the job seeker is required to pay a fee to the recruitment agency, as per the contract. This fee is generally capped at €2,000 (US\$2,48093) and at €150 (US\$18594) for au pair jobs.95

The Japanese government prohibits the charging of recruitment fees to the employee under Article 6 of the Labour Standards Act, with the Labour Standards Inspection Offices conducting inspections to ensure compliance.<sup>96</sup>

Recruitment agencies, however, are governed by the Employment Security Act (Article 32-3), which allows licensed recruitment agencies to collect fees from job seekers in special cases, such as when "collection of a fee from a job seeker is found to be necessary for the interest of said job seeker."

These provisions are also applicable to migrant workers if they use agencies based in Japan to either find them work in Japan or make arrangements for them to come to work there.

India's Employment (Amendment) Rules 2009 states that recruitment agents can charge fees to the employee but that they must be limited to 45 days' wages or a maximum of 20,000 Indian Rupees (US\$312°9).100 Overcharging and abuses within this system are, however, common and well documented.101 The Ministry of External Affairs launched an eMigrate online foreign worker recruitment system in 2015¹02 in an effort to make the system "safer, more orderly and humane,"103 through ensuring foreign employers and recruiters comply with relevant regulations. However, widespread abuses confirm that compliance remains an issue.104

Half the G20 countries have not implemented any laws to make sure that workers are not charged any recruitment fees. Australia does not have a federal policy that explicitly prohibits charging of fees to the employee as a payment for labour supply services or facilitating migration. Although the Fair Work Act 2009 specifies that companies hiring through labour hire agencies pay the labour hire agency (the "on-hire business") a fee for their recruitment services, it does not specifically prohibit recruitment fees from being charged to the employee. There are some existing regulatory frameworks for labour hire firms and recruitment agencies, however these differ largely among Australia's states and

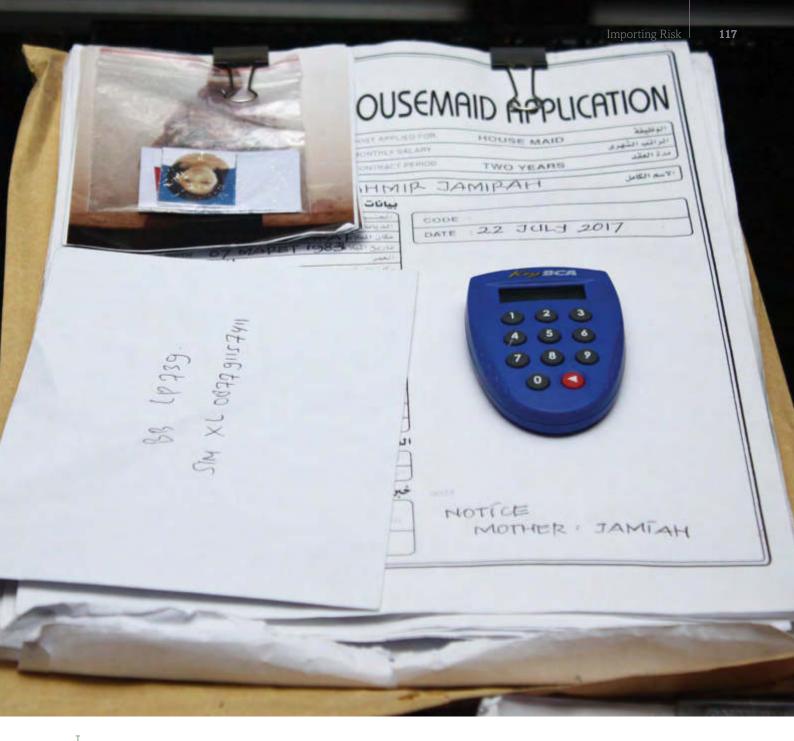
territories.<sup>106</sup> Also, it is uncertain whether and how these laws can be enforced with regard to overseas agents or brokers.<sup>107</sup>

China does not have a comprehensive legislative framework prohibiting recruitment fees from being charged to the employee, but China's legal framework does include some unique features focused on protecting workers in the informal economy and those who are engaged through recruiters. 108 In 2008, China enacted a Labour Contract Law in an effort to formalise all employment relations.<sup>109</sup> This gave workers robust protection and made contracts compulsory for all workers.<sup>110</sup> An amendment made to the law in 2013 allows for greater protection of workers who are employed through a recruitment agency. The revisions require employers to hire the majority of their workforce directly in order to restrict the number of workers engaged through recruiters. The amendment guarantees contract workers the same rights as their directly-employed counterparts, such as the required social benefits (including pensions, health insurance, and unemployment benefits)111 and payment of their full wage.112

Once migrant workers have been recruited, it is important that they are provided with safeguards that ensure decent working conditions. This should include protection under domestic labour laws, regardless of industry or specific characteristic of their work arrangements (such as not having a written contract). Table 7 classifies the legal protections afforded to workers across the G20 countries. Nine G20 countries have labour laws that cover all workers (national and foreign workers). While such legislation exists in Indonesia, in practice, domestic workers are unable to access the protections these laws afford. As for the majority of G20 countries, certain sectors are not covered by national labour law. Table 7 details which sectors are excluded in each of those countries.

TABLE 7
G20 government responses on equal labour laws

Labour laws cover all workers	Labour laws exclude workers in certain sectors
Argentina	Australia (domestic workers excluded in one state)
Brazil	Germany (domestic workers and domestic workers of diplomats excluded)
Canada	India (domestic workers excluded)
China	Italy (employees of companies with fewer than 15 workers and domestic workers excluded)
France	Japan (domestic workers and those in informal sectors excluded)
Indonesia	Russia (employees of companies connected with 2018 World Cup excluded from labour law)
Mexico	Korea, Republic of (South Korea) (domestic workers excluded)
South Africa	Turkey (multiple sectors excluded)
United Kingdom	United States (domestic workers excluded from laws to unionise and from protections when working in the private home of a family)
	Saudi Arabia (migrant workers, domestic workers and seafarers excluded)



Police showed some evidence of human trafficking crimes during a press conference at the Indonesian National Police Criminal Investigation Agency Office, Jakarta, August, 2017. The Indonesian Police's Special Task Force on Human Trafficking, successfully dismantled international human trafficking syndicates, which were trafficking individuals to the Middle East, in particular Syria and Abu Dhabi in the UAE. A total of eight suspects were arrested, and dozens of passports, visas, and other documents were confiscated as evidence. Police also managed to rescue some of the victims who were going to be sent to Syria and Abu Dhabi; one of them was a 14-year-old girl.

Photo credit: Aditya Irawan/NurPhoto via Getty Images

# Recommendations: What should governments and businesses be doing?

### **G20 Governments**

### Public procurement

- » Governments should require publicly funded entities to report on steps taken to eliminate modern slavery from their supply chains.
- » Governments should require government contractors (and their sub-contractors) to certify that they take specific preventive measures to detect and eliminate trafficking and forced labour in their supply chains.

### Business supply chains

- » Governments should enact legislation that requires large businesses to report on steps taken to eliminate modern slavery within their business and supply chains ("modern slavery statements").
- » Governments should manage a free and publicly accessible repository to file all modern slavery statements to ensure businesses can be held accountable for non-compliance.
- » Governments should ensure that any legislative reform aligns with legal and regulatory efforts within the G20, in consultation with business, civil society, and other stakeholders.

#### Ethical recruitment

Governments should take measures to make sure that migrant workers (and not just nationals) are protected by:

- » Ensuring that labour law covers national and migrant workers in all sectors.
- » Enacting legislation that prohibits charging recruitment fees to the employee.
- » Enacting laws prohibiting employers or agencies from withholding personal identification documents of workers.
- » Regulating third party labour agencies via a formal licensing system that is aligned across G20 countries (similar to the UK Gangmasters and Labour Abuse Authority).
- » Identifying and promoting safe migration corridors for workers.

### **G20** Businesses

### Transparency in Supply Chains

- » Businesses should report annually on steps taken to address risks and eradicate modern slavery within their organisations and supply chains, ensuring these reports are signed by their boards and made publicly available.
- » Businesses should proactively and regularly conduct due diligence for modern slavery risks (in accordance with emerging international standards) internally and within their supply chains, and they should encourage their suppliers to make similar efforts.

### Ethical recruitment

Businesses should demonstrate good practices around ethical recruitment. These include:

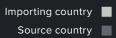
- » Never withholding workers' identity documents.
- » Never charging recruitment fees to workers and using only those recruitment agencies that have a zero-fee policy.
- » Businesses should provide jobs, internships, skills training, and opportunities to survivors of modern slavery.
- » Businesses should engage with governments and stakeholders to develop laws and regulations relating to supply chains to ensure legislative reform has meaningful impact.
- » Businesses should share information and good practices with regard to ensuring their supply chains are free of modern slavery on a pre-competitive basis across industries and sectors, as well as support and engage with civil society groups on these matters.

The Missing public art campaign.
The Missing Mural Walk 'The Hunt for
the Lost Durga' in Kolkata, India, was
created in 2017 to raise awareness
of the sex trafficking of girls. Eight
murals tell the story of a girl who has
been kidnapped into sex trafficking.



### **ARGENTINA**

Top 5 imported products at risk of modern slavery













**ELECTRONICS**<sup>†</sup>

**GARMENTS** 

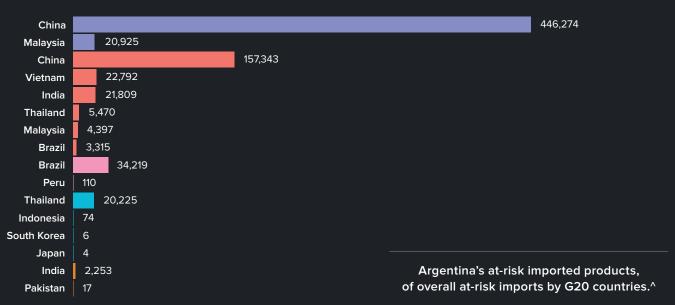
**TIMBER** 

FISH

H CARPETS



Breakdown of at-risk imported products by source country (annually, in thousands of US\$)\*^



US\$739m/US\$354b

### **AUSTRALIA**

Top 5 imported products at risk of modern slavery

Importing country Source country









RICE



ELECTRONICS<sup>†</sup>

**GARMENTS** 

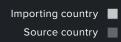
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Russia
China
China
Vietnam
Taiwan
India
Thalland



### **BRAZIL**

Top 5 imported products at risk of modern slavery













GARMENTS ELECTRONICS<sup>†</sup>

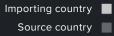
FISH CATTLE





### **CANADA**

Top 5 imported products at risk of modern slavery













ELECTRONICS<sup>†</sup>

**GARMENTS** 

OLD

FISH

Canada

Canada

Canada

Canada

Chas

South Kerker

Chas

Share

Malayeis

Malayeis

Properties



### **CHINA**

Top 5 imported products at risk of modern slavery







**FISH** 



COAL



**GARMENTS** 



Importing country Source country

**SUGARCANE** 



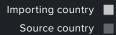
### Breakdown of at-risk imported products by source country (annually, in thousands of US\$)\*^



US\$6b/US\$354b

### **FRANCE**

Top 5 imported products at risk of modern slavery





**GARMENTS** 



**ELECTRONICS**<sup>†</sup>







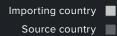
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### **GERMANY**

Top 5 imported products at risk of modern slavery











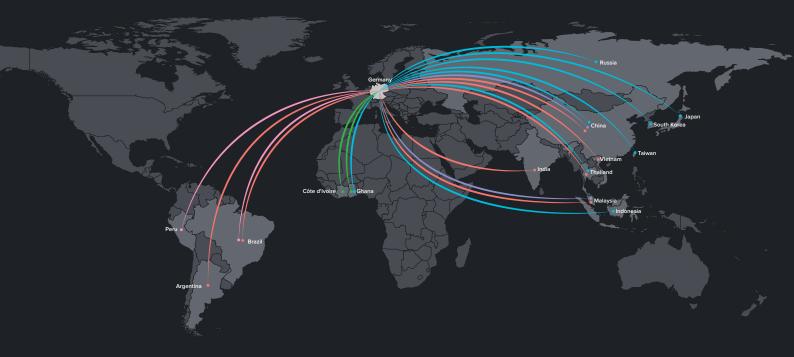


**ELECTRONICS**<sup>†</sup>

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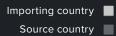
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### **INDIA**

Top 5 imported products at risk of modern slavery





**ELECTRONICS**<sup>†</sup>

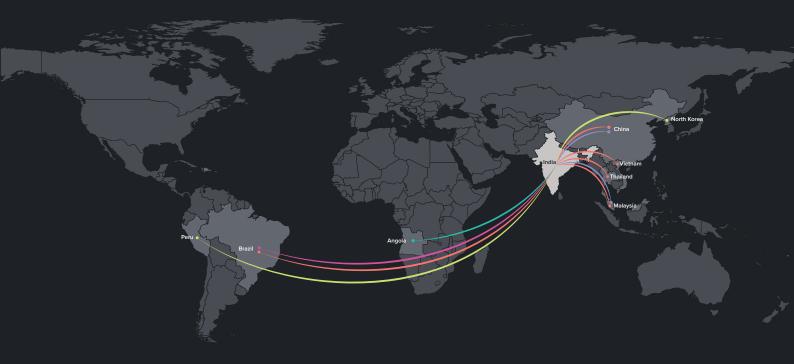




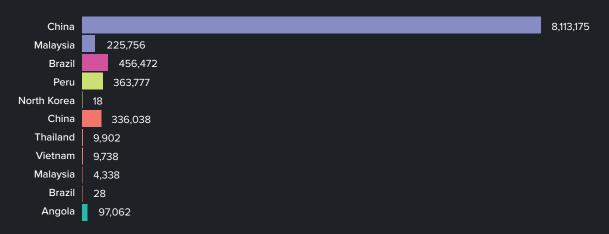




GARMENTS



Breakdown of at-risk imported products by source country (annually, in thousands of US\$)\*^

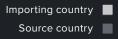


India's at-risk imported products, of overall at-risk imports by G20 countries.^

US\$10b/US\$354b

### **INDONESIA**

Top 5 imported products at risk of modern slavery

















FISH



Breakdown of at-risk imported products by source country (annually, in thousands of US\$)\*^



US\$3b/US\$354b

### **ITALY**

Top 5 imported products at risk of modern slavery

Importing country Source country











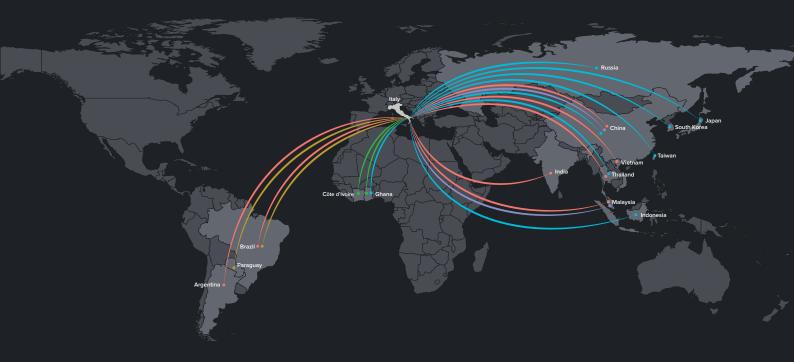
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COCOA

CATTLE

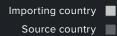
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### **JAPAN**

Top 5 imported products at risk of modern slavery













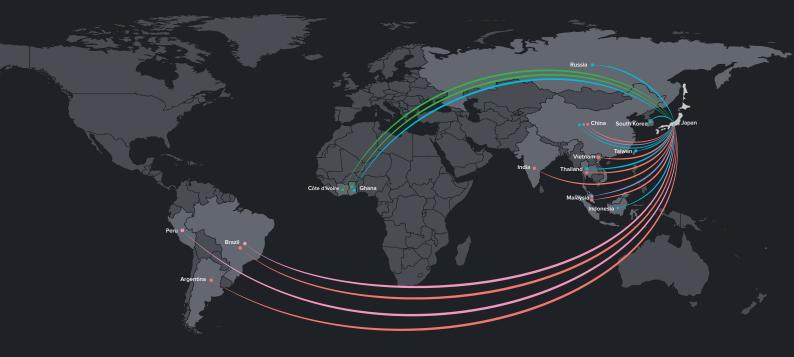
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**GARMENTS** 

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COCOA

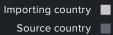
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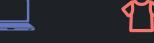


### **MEXICO**

Top 5 imported products at risk of modern slavery













**ELECTRONICS**<sup>†</sup>

**GARMENTS** 

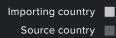
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**TIMBER** 



### **RUSSIA**

Top 5 imported products at risk of modern slavery





**ELECTRONICS**<sup>†</sup>



**GARMENTS** 

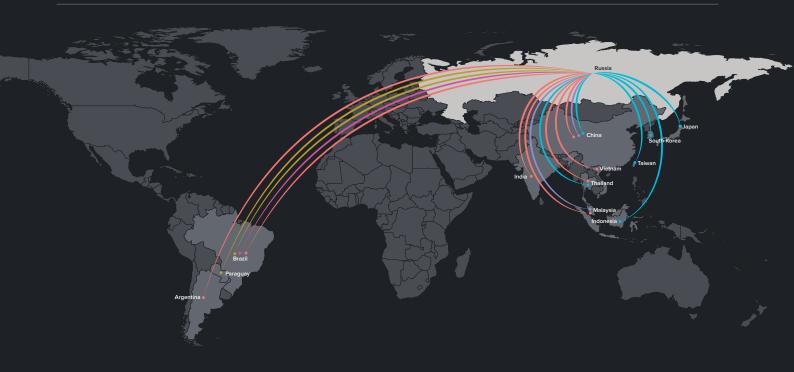


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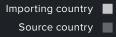
CANE FISH





# SAUDI ARABIA

Top 5 imported products at risk of modern slavery











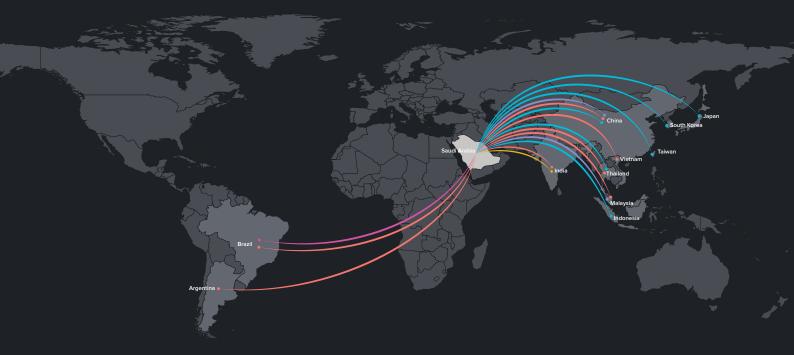


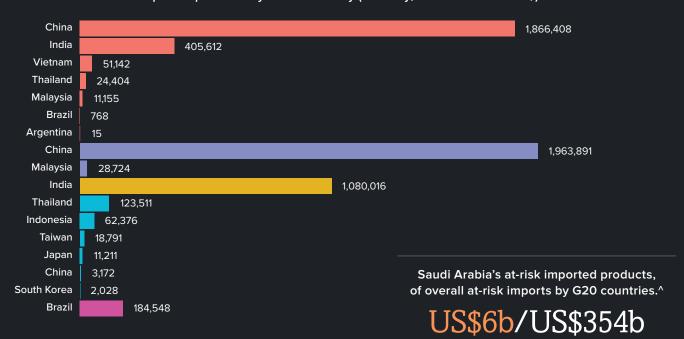
GARMENTS E

**ELECTRONICS**<sup>†</sup>

RICE

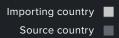
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# **SOUTH KOREA**

Top 5 imported products at risk of modern slavery













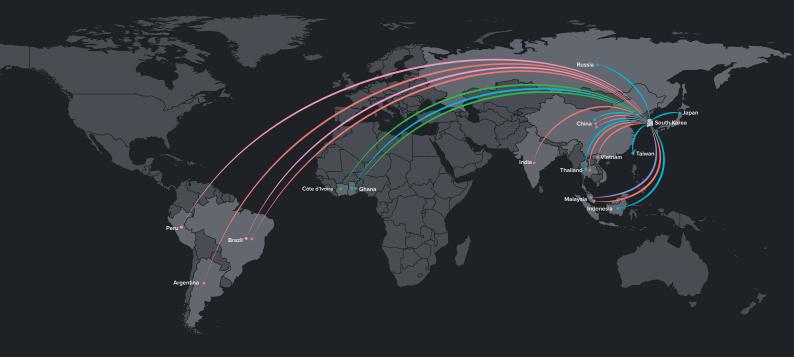
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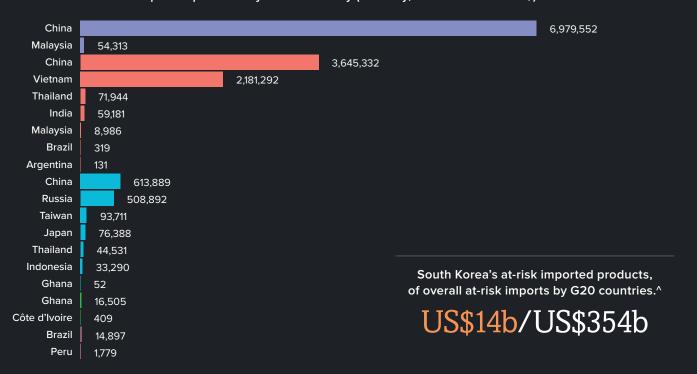
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FISH

COCOA

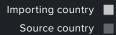
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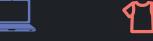


# **TURKEY**

Top 5 imported products at risk of modern slavery













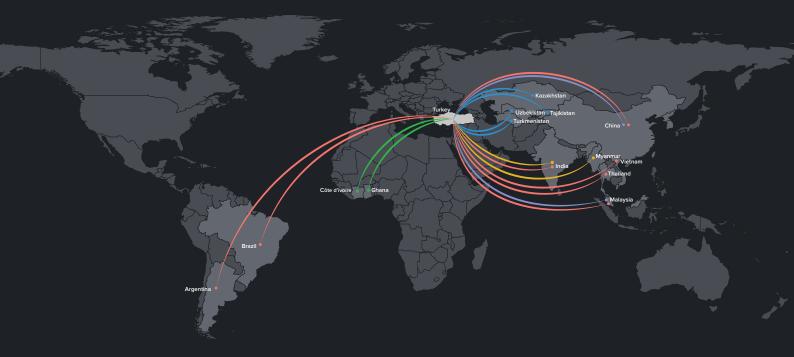
**ELECTRONICS**<sup>†</sup>

**GARMENTS** 

COCOA

**COTTON** 

RICE





# UNITED KINGDOM

Top 5 imported products at risk of modern slavery

Importing country

Source country





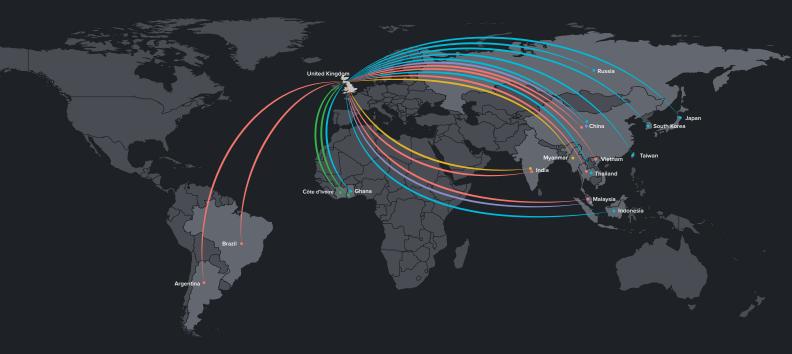


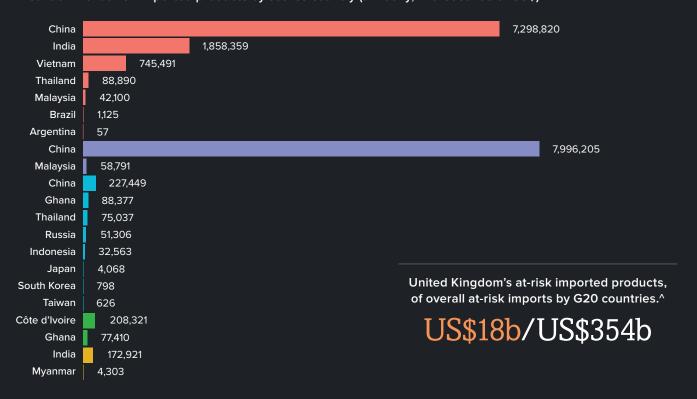




GARMENTS ELECTRONICS<sup>†</sup>

FISH COCOA



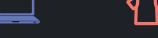


# **UNITED STATES**

Top 5 imported products at risk of modern slavery

Importing country Source country





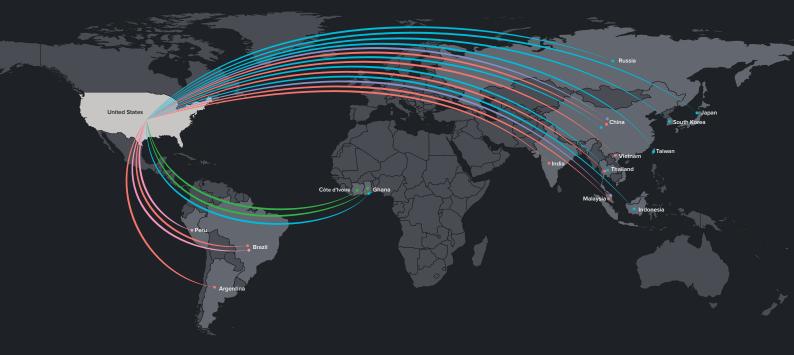


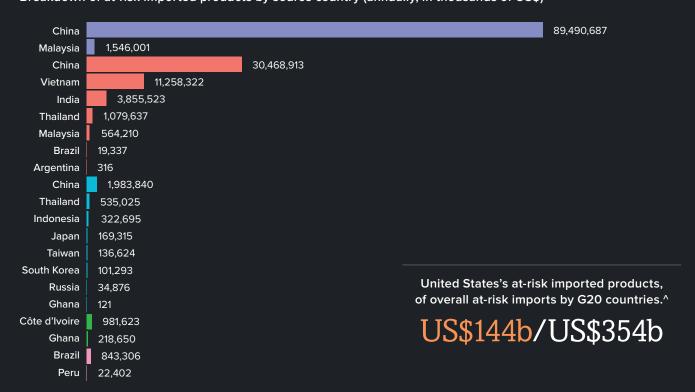




**ELECTRONICS**<sup>†</sup> **GARMENTS**  **FISH** 

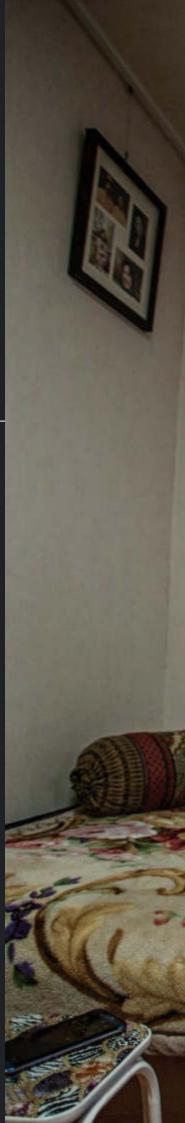
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Young-soon, 80, former prisoner and forced labourer in North Korea

I knew Song Hye-rim from school. One day, she told me she was moving into the 'great leader' Kim Jong-il's residence. A few months later, my family and I were sent to Yodok, a prison camp. My parents and my eight-year-old son died of malnutrition there, and the rest of my family were either shot or drowned. Nine years later, after my release, I was told we'd been imprisoned because I knew about Kim Jong-il's relationship with Song. Song Hye-rim and Kim Jong-il's illegitimate son, Kim Jong-nam, was assassinated earlier this year

Photo credit: James Whitlow Deland



### **APPENDIX 1:**

#### **Terminology**

In the context of this report, modern slavery covers a set of specific legal concepts including forced labour, debt bondage, forced marriage, slavery and slavery-like practices, and human trafficking.

Although modern slavery is not defined in law, it is used as an umbrella term that focuses attention on commonalities across these legal concepts. Essentially, it refers to situations of exploitation that a person cannot refuse or leave because of threats, violence, coercion, deception, and/or abuse of power. For example, their passport might be taken away if they are in a foreign country, they might experience or be threatened with violence, or their family might be threatened.

Different countries use different terminologies to describe modern slavery, including the term slavery itself but also other concepts such as human trafficking, forced labour, debt bondage, forced or servile marriage, and the sale or exploitation of children. These terms are defined in various international agreements (treaties), which many countries have voluntarily signed on and agreed to. The following are the key definitions to which most governments have agreed, thereby committing to prohibit these crimes through their national laws and policies.

#### Human trafficking

Human trafficking is defined in the UN Trafficking in Persons Protocol as involving three steps.

- Recruitment, transportation, transfer, harbouring or receipt of persons;
- 2/ By means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person;
- 3/ With the intent of exploiting that person through: prostitution of others, sexual exploitation, forced labour, slavery (or similar practices), servitude, and removal of organs.

The recruitment, transportation, transfer, harbouring or receipt of a child for the purpose of exploitation shall be considered "trafficking in persons" even if this does not involve threat, use of force, or coercion.

#### Forced labour

Forced labour is defined in the International Labour Organization (ILO) Convention on Forced Labour 1930 as "all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily." This excludes compulsory military service, normal civil obligations, penalties imposed by a court action taken in an emergency, and minor communal services.

#### Slavery and slavery-like practices

Slavery is defined in the 1926 Slavery Convention as the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised. In a later treaty, States agreed that there are also certain "slavery-like practices": debt bondage, forced or servile marriage, sale or exploitation of children (including in armed conflict), and descent-based slavery.

#### Debt bondage

Debt bondage is a status or condition, where one person has pledged their labour or service (or that of someone under their control), in circumstances where the fair value of that labour or service is not reasonably applied to reducing the debt or length of debt, or the length and nature of the service is not limited or defined.

Marian (not her real name), 18, a victim of forced marriage who set herself on fire after fleeing her husband, poses showing the scars on her hand and arm at the Elman Peace and Human Rights Centre in Mogadishu, March 2015, where survivors of sexual violence can find refuge, medical care and support. Sexual violence is widespread in Somalia and rarely prosecuted. If anyone is punished at all it is often the victim, not the perpetrator.

Photo credit: Carl De Souza/AFP/Getty Images



#### Forced or servile marriage

The following are defined as practices "similar to slavery" in the 1956 Slavery Convention. Any institution or practice whereby:

- » A woman, without the right to refuse, is promised or given in marriage on payment of a consideration in money or in kind to her parents, guardian, family or any other person or group; or
- » The husband of a woman, his family, or his clan, has the right to transfer her to another person for value received or otherwise; or
- » A woman on the death of her husband is liable to be inherited by another person.

More recent interpretations of forced marriage are broader than the practices defined in the 1956 Slavery Convention. In 2006 the United-Nations Secretary-General noted that "a forced marriage is one lacking the free and valid consent of at least one of the parties." Forced marriage therefore refers to any situations in which persons, regardless of their age, have been forced to marry without their consent.

Child, early and forced marriages are terms that are sometimes used interchangeably. Some child marriages, particularly those involving children under the age of 16 years, are considered a form of forced marriage, given that one and or/both parties have not expressed full, free, and informed

consent (as noted in the joint general recommendation No. 31 of the Committee on the Elimination of Discrimination against Women). It is important to note that in many countries 16 and 17-year-olds who wish to marry are legally able to do so following a judicial ruling or parental consent.

#### Worst forms of child labour

Drawing on the 1999 International Labour Conference Convention No.182, concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, the term "worst forms of child labour" comprises:

- a. all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
- the use, procuring or offering of a child for prostitution, for the production of pornography, or for pornographic performances;
- the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;
- d. work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

### **APPENDIX 2:**

#### Part A: Global Slavery Index Vulnerability Model

#### Why measure vulnerability?

Understanding a problem is fundamental to being able to respond effectively and efficiently to it. This is particularly true for crimes that are as complex as modern slavery. Data that enable us to understand the systemic, individual, and environmental factors that enable modern slavery to occur are critical to being able to design effective preventative measures, and also to being able to better determine where modern slavery may be occurring completely out of sight, within "blind spots."

Complementing the prevalence estimates, the Vulnerability Model is designed to enable us to identify and better understand the potential drivers of this crime. The existing literature and expert input suggests a connection between modern slavery and related systemic factors such as corruption,1 conflict,2 and adverse environmental change<sup>3</sup> among many other vulnerability factors. While this evidence provides an important starting point, without measurement to better understand relationships and interactions between these factors, we cannot understand their significance. To provide a reliable evidence base upon which governments, civil society groups, and businesses can build more effective responses, a statistical approach to identifying the factors that are correlated with increased risk of enslavement.4 In other words, the Vulnerability Model uses statistical testing and processes to identify the factors that explain or predict the prevalence of modern slavery. Reflecting the limits of existing data (particularly on prevalence but also on key variables), the Vulnerability Model is necessarily in the early stages of development and, as such, it should be viewed as iterative. Nonetheless, the Vulnerability Model provides an important resource to better understand and predict where modern slavery is most likely to occur based on our present best available data.

The 2018 Vulnerability Model maps 23 risk variables across five major dimensions:

- 1/ Governance Issues
- 2/ Lack of Basic Needs
- 3 / Inequality
- 4/ Disenfranchised Groups
- 5 / Effects of Conflict

The methodology that was used to develop the Vulnerability Model is explained in this section. It includes, initially, steps taken in the development of the Vulnerability Model. As this drew upon recent Expert Working Group consultations and a review process, we briefly describe this process and note the decisions and changes that have been undertaken as a result of that review in implementing the methodology. Finally, this section provides a summary of the factors and variables that comprise the final 2018 Vulnerability Model.

# Development of the Vulnerability Model

#### Theoretical framework

The Vulnerability Model is guided by human security and crime prevention theories. Human security as a developing security sub-field has many overlapping and diverging definitions without any clear "consensual definition" among scholars. The human security theory was developed by the UN Development Programme to capture seven major areas of insecurity: economic, political, food, community, personal, health, and environment. The most basic shared characteristic of human security as a concept involves a focus on the safety and wellbeing of individuals regardless of their citizenship status or relationship to a nation state.

Importantly, the field of human security allows us to situate our understanding of modern slavery – a complex crime that is both a cause and a symptom of many other global problems such as environmental disasters, conflict, and financial crises – within the larger discourse on vulnerability and to ensure that we were not missing significant dimensions of vulnerability to modern slavery. The use of human security theory also emphasises the global importance of the Sustainable Development Goals (SDGs) and links our vulnerability theory and modelling exercises to the developing global discussion on common metrics and goals for international development. Finally, this approach allows for the inclusion and exclusion of variables to be grounded in theory, while remaining an empirically exploratory approach.<sup>6</sup>

#### The current Vulnerability Model

The 2018 Global Slavery Index includes an assessment of vulnerability that is used to measure the factors linked to the risk of modern slavery in each country. The importance of this work is twofold:

- 1/ To improve our understanding of the drivers of modern slavery through quantification such that we can assess changes in these drivers, and therefore in rates of prevalence, over time;
- 2/ It provides important data that are used to arrive at estimates in countries for which no reliable, nationallevel data exist.

The major refinements made since the 2016 Global Slavery Index and the process by which these decisions were arrived at, are set out below.

# Overview of 2018 Vulnerability Model development

The Vulnerability Model development process included the following phases:

- 1/ Review of 2016 Vulnerability Model
- 2 / Data Collation
- 3/ Data preparation (normalisation, inversion, and logarithmic transformation of certain variables including refugees, internally displaced persons, and GDP (PPP))
- 4 / Collinearity checks (dropped if variance inflation factor (VIF) above 10 and tolerance below 0.1)
- 5 / Principal factor analysis
- 6 / Final factor loadings and placements
- 7/ Missing data solutions
- 8 / Eigenvalue weighting by factor. Throughout this process, the major decision points and a summary of the statistical team's determinations are captured for transparency
- 9 / Quality assurance checks

# Phase 1. Review of 2016 Vulnerability Model

After an internal review of the 2016 Vulnerability Model, our Expert Working Group members were consulted between August and December 2016 regarding the areas for improvement that had been identified. That feedback was then summarised and a second round of consultations took place in October and November 2017.

We sought feedback on the following areas, and below each topic is a summary of key feedback received:

#### Theoretical and empirical gaps

Generally, our experts maintained the importance for continuity and did not identify significant gaps in our model that we had not already attempted to address through sufficient alternative data sources.

Generally, experts were supportive of the use of human security theory, but desired further elaboration on how crime prevention theory was formally utilised. This highlighted the need for articulation and finalisation of a generalisable theory related to determinants of slavery, which will be dealt with in a forthcoming publication by Joudo Larsen and Durgana.

#### Normalisation and standardisation

Experts recommended that we consider different approaches to determine the overall final data transformation method for the 2018 Vulnerability Model. Some suggested that we employ statistical standardisation with a mean of 0 and a standard deviation of 1. Others cautioned us to consider this question both philosophically (do we believe that these variables are normally distributed?) and empirically (how significant to our work are the outlier figures?). As it stands, our current normalisation process features outliers prominently in our calculations, while statistical standardisation of our variables would collapse/ lose these elements.

#### Missing data

Experts recommended that we consider alternative forms of imputation that would allow us to avoid dimension level imputation by employing either country vulnerability averages (as we have done) or using regional averages at the variable level per affected country.

#### Weighting by eigenvalue

Experts considered and supported the issue of weighting the factors by eigenvalues. Even though weighting by eigenvalue presents a slight change to our traditional vulnerability range beyond a 100-point scale, weighted values can be (and ultimately were) normalised on a 1-100 scale.

The actions taken as a result of these recommendations and the final decisions made are summarised in the relevant sections of the process, as set out below.

#### Phase 2. Data collation

#### Data requirements for model inclusion

In 2016 and 2017, we reviewed the Vulnerability Model, taking account of human security theory, and considering issues related to data quality, availability, and limitations. Key reasons for adding or removing variables from the model include:

- A. To ensure continual availability of data data that were irregularly published and updated, or lacked transparency about original data source, were removed.
- B. To ensure we get as close to the source of the data as possible: for example, using original source data rather than composite scores from other indices.
- C. To replace weaker measures with potentially stronger variables.
- To address conceptual gaps in our framework and model.

We collated all tested vulnerability data (35 variables listed below) for the reference period ending on 15 April 2017. This list of variables includes some that were added following the expert review; data on Environmental Performance Index were added and data from the Gender Inequality Index (which had been in the original 2014 Vulnerability Model but dropped in the 2016 Vulnerability Model for reasons of collinearity with other variables) were added for re-testing. A further change from 2016 was the exclusion of "Internet usage" due to cessation of data collection on that variable by the World Bank.

The final list of tested vulnerability variables is as follows:

- 1/ Political Rights
- 2/ Civil Rights
- 3/ Financial Inclusion Received Wages
- 4/ Literacy
- 5 / Child Mortality
- 6/ Corruption
- 7/ Alternative Social Safety Net measure
- 8 / GDP (PPP)
- 9 / Government Effectiveness
- 10 / Gender Inequality Index
- 11 / Environmental Performance Index (EPI)
- 12 / Financial Inclusion Ability to Borrow Money
- 13 / Financial Inclusion Ability to Obtain Emergency Funds
- 14 / Cell Phone Users

- 15 / Social Safety Net
- 16 / Undernourishment
- 17 / Access to Clean Water
- 18 / Tuberculosis
- 19 / Confidence in Judicial Systems
- 20 / Political Instability
- 21 / Impact of Terrorism
- 22 / Internal Conflicts Fought
- 23 / Violent Crime
- 24 / Women's Physical Security
- 25 / Weapons Access
- 26 / Gini Coefficient
- 27 / Same Sex Rights
- 28 / Disabled Rights
- 29 / Acceptance of Immigrants
- 30 / Acceptance of Minorities<sup>7</sup>
- 31/ Global Slavery Index Government Response
- 32 / Alternative Political Rights measure
- 33 / Regulatory Quality
- 34 / Internally Displaced Persons
- 35 / Refugees

#### Phase 3. Data preparation - highlights

As recommended by the Expert Working Group, both methods of standardising and normalising the data were tested and evaluated. We determined that normalisation would be retained for its ease of use and 1-100 scale, particularly in aggregation with the other components of the Index. There were also conceptual concerns about forcing standardisation on these variables, given many of them could not be assumed to have a normal distribution. The standardised range of values was much closer and also resulted in negative values. This would have presented a challenge in terms of our prior approaches to vulnerability values and scores and would not have been as intuitive to our policy audience as our existing normalisation scales.

#### Normalisation

The following variables were normalised using the normalisation formula below: Political Rights, Civil Rights, Cell Phone Users, Social Safety Net, Child Mortality, Tuberculosis, Political Instability, Impact of Terrorism, Internal Conflicts Fought, Violent Crime, Women's Physical Security, Weapons Access, Global Slavery Index Government Response, Alternative Social Safety Net measure, Alternative Political Rights Variable, Government Effectiveness, Regulatory Quality, and Gender Inequality Index.

#### Normalisation formula:

Normalisation: Normalised Value = 1+(Reported Value – minimum value)\*(100-1)/(maximum value – minimum value)

#### Inversion formula for normalised variables:

#### 101-normalised value = Inverted Value

Certain selected variables were inverted to ensure that a high value indicates higher vulnerability on every variable. The variables affected are: Cell Phone Users, Literacy, Social Safety Net, Access to Clean Water, Corruption, Global Slavery Index Government Response, Alternative Political Rights, Government Effectiveness, Regulatory Quality, and Environmental Performance Index.

#### Phase 4. Collinearity testing and results

Collinearity among the vulnerability variables was assessed to identify where variables are already highly correlated. The collinearity results for any pairs of variables with values above 0.80 are reported in Table 1.

TABLE 1
Collinearity results for pairs of variables with values above 0.80

Variable 1	Variable 2	Collinearity Result
Child Mortality	Access to Water	0.8008
Child Mortality	Alt. Social Safety net	0.8143
Child Mortality	Literacy	0.8040
Corruption	Government Effectiveness	0.9371
Corruption	Regulatory Quality	0.9048
Government Effectiveness	Political Instability	0.8089
Alt. Social Safety Net	Gender Inequality Index	0.8277
Alt. Social Safety Net	Environmental Performance Index	0.8794
Corruption	Political Instability	0.8063
Civil Liberties	Political Rights	0.9435
Political Rights	Alt. Political Rights Measure	0.8536
Alt. Political Rights Measure	Civil Liberties	0.8261
Civil Liberties	Political Instability	0.8063
Alt. Social Safety Net	Financial Inclusion – Received Wages	0.8156
Financial Inclusion – Received Wages	Government Effectiveness	0.8333
Financial Inclusion – Received Wages	Gender Inequality Index	0.8506
Financial Inclusion – Received Wages	Environmental Performance Index	0.8097
Child Mortality	Gender Inequality Index	0.8048
Government Effectiveness	Regulatory Quality	0.9377
Government Effectiveness	Gender Inequality Index	0.8072
Gender Inequality Index	Environmental Performance Index	0.8226
Government Effectiveness	GDP (PPP)	0.8236
Gender Inequality Index	GDP (PPP)	0.8074
Environmental Performance Index	GDP (PPP)	0.8253

Our Experts had previously recommended that any variables with VIF scores above 10 and Tolerance scores below 0.1 would be dropped from the model, and we followed this approach. Despite the conceptual gaps that were potentially addressed by their inclusion in the model, the Gender Inequality Index and Environmental

Performance Index variables suggested by our Experts were ultimately dropped due to high collinearity with other vulnerability measures, suggesting a degree of redundancy in their explanatory power within the model given existing variables. A full list of variables dropped from the model is presented in Table 2.

TABLE 2
Variables Dropped from Model following collinearity check on normalised data (with VIF and Tolerance scores)

Variable	VIF	Tolerance
Political Rights <sup>8</sup>	17.89	0.0559
Civil Rights <sup>9</sup>	22.91	0.0436
Financial Inclusion – Received Wages <sup>10</sup>	10.36	0.0966
Literacy <sup>11</sup>	13.36	0.0749
Child Mortality <sup>12</sup>	13.03	0.0768
Corruption <sup>13</sup>	10.88	0.0919
Alt. Social Safety Net <sup>14</sup>	14.62	0.0684
GDP (PPP) <sup>15</sup>	15.99	0.0625
Government Effectiveness <sup>16</sup>	22.01	0.0454
Gender Inequality Index <sup>17</sup>	20.05	0.0499
Environmental Performance Index <sup>18</sup>	18.12	0.0552

Following edits to the list reflecting the collinearity checks described above, our final list of variables retained for factor analysis was as follows:

- 1/ Financial Inclusion Ability to Borrow Money
- 2/ Financial Inclusion Ability to Obtain Emergency Funds
- 3 / Cell Phone Users
- 4 / Social Safety Net
- 5/ Undernourishment
- 6 / Access to Clean Water
- 7/ Tuberculosis
- 8/ Confidence in Judicial Systems
- 9 / Political Instability
- 10 / Impact of Terrorism
- 11 / Internal Conflicts Fought
- 12 / Violent Crime
- 13 / Women's Physical Security
- 14 / Weapons Access
- 15 / Gini Coefficient
- 16 / Same Sex Rights

- 17 / Disabled Rights
- 18 / Acceptance of Immigrants
- 19 / Acceptance of Minorities
- 20 / Global Slavery Index Government Response
- 21/ Alternative Political Rights Measure<sup>19</sup>
- 22 / Regulatory Quality
- 23 / Internally Displaced Persons
- 24 / Refugees

#### Phase 5: Principal factor analysis

Principal Factor Analysis or Factor Analysis is a statistical technique used to reduce the number of variables so that relationships between variables can be easily understood. It does so by regrouping variables into a limited set of clusters, with each cluster representing a latent construct that has not been directly measured (such as governance issues, inequality, etc.). Hence, it helps to isolate constructs and concepts from an array of many variables. Principal Factor Analysis typically retains all factors with eigenvalues scores over 1.0.

A six-factor solution is naturally occurring with the following eigenvalues expressed (Table 3):

TABLE 3
Initial Factor Analysis solution table

Factor	Variance	Difference	Proportion	Cumulative
Factor One	5.68067	3.20518	0.3422	0.3422
Factor Two	2.47549	0.53718	0.1491	0.4913
Factor Three	1.93831	0.03290	0.1167	0.6080
Factor Four	1.90541	0.07282	0.1148	0.7228
Factor Five	1.83259	0.15846	0.1104	0.8332
Factor Six	1.67414	0.16979	0.1008	0.9340

When a six-factor solution is forced in the factor analysis, the values change slightly to the following:

TABLE 4
Six-factor solution table

Factor	Variance	Difference	Proportion	Cumulative
Factor One	5.82675	3.47222	0.3510	0.3510
Factor Two	2.35453	0.16067	0.1418	0.4928
Factor Three	2.19385	0.11751	0.1321	0.6249
Factor Four	2.07634	0.18338	0.1251	0.7500
Factor Five	1.89297	0.00861	0.1140	0.8640
Factor Six	1.88435		0.1135	0.9975

When a four-factor solution is forced in the factor analysis, the values are as follows:

TABLE 5
Four-factor solution table

Factor	Variance	Difference	Proportion	Cumulative
Factor One	5.52463	1.83118	0.3328	0.3328
Factor Two	3.69345	1.06553	0.2225	0.5552
Factor Three	2.62792	0.18474	0.1583	0.7135
Factor Four	2.44318		0.1472	0.8607

A forced five-factor solution yields the following values:

TABLE 6
Five-factor solution table

Factor	Variance	Difference	Proportion	Cumulative
Factor One	5.76130	2.33848	0.3470	0.3470
Factor Two	3.42282	1.18920	0.2062	0.5532
Factor Three	2.23362	0.14157	0.1345	0.6877
Factor Four	2.09205	0.15377	0.1260	0.8137
Factor Five	1.93828		0.1167	0.9305

The five-factor model (Table 6) resulted in a consolidated second factor that closely matches the 2016 model's factor loadings. On this basis, we decided to proceed with a five-factor solution.

#### Phase 6: Final factor loadings and placement

In the five-factor solution, the Factor Analysis variable loadings are as set out in Table 7.

TABLE 7
Final factor loadings and placement table

Variable	Factor One	Factor Two	Factor Three	Factor Four	Factor Five	Uniqueness
Ability to Borrow Money		0.6194				0.5226
Ability to Obtain Emergency Funds			0.5324			0.5590
Cell Phone Users		0.5010				0.5959
Social Safety Net		0.7023				0.3238
Undernourishment		0.7377				0.2985
Access to Clean Water	0.5625	0.6366				0.2753
Tuberculosis		0.6174				0.4603
Confidence in Judicial Systems			0.4174			0.5452
Political Instability	0.8902					0.1806
Impact of Terrorism					0.8137	0.2805
Internal Conflicts Fought					0.7129	0.4397
Violent Crime	0.5462		0.5980			0.2135
Women's Physical Security	0.6270					0.3277
Weapons Access	0.7040		0.4533			0.2334
Gini Coefficient			0.7416			0.3165
Same Sex Rights	0.6218			0.4467		0.2636
Disabled Rights	0.5396					0.3219
Acceptance of Immigrants				0.8332		0.2960
Acceptance of Minorities				0.7414		0.4080
GSI Government Response	0.6805					0.3622
Political Rights	0.7576					0.3431
Regulatory Quality	0.8436					0.1485
Internally Displaced Persons	0.6976				0.4500	0.2368
Refugees						0.5995

We then started to conceptualise the factors as distinct dimensions based on the final factor loadings from Table 7. In consultation with our Expert Working Group, we employed analytical frameworks focused on concept-variable consistency to help determine how closely empirical data or "measured concepts" match the phenomena they are meant to capture. This framework is employed not only in the selection of the vulnerability variables themselves, but

then also their resulting role in the overall dimension and, consequently, its label. Further, the recommendation that latent factor construction be re-focused on *risk* to slavery, and not expressed as resilience, was also implemented when naming the dimensions. The results of this process are set out in Table 8, where the dimension headings are presented. Please note the refugees variable has been dropped as it does not load on any of the retained factors.

TABLE 8
Initial factor groupings by variables (final factor loading in bold, multiple loadings in italics)

Factor One (5.76 Eigen) Governance Issues	Factor Two (3.422 Eigen) Lack of Basic Needs	Factor Three (2.233 Eigen) Inequality	Factor Four (2.092 Eigen) Disenfranchised Groups	Factor Five (1.938 Eigen) Effects of Conflict
Political Instability	Cell Phone Users	Ability to Obtain Emergency Funds	Acceptance of Immigrants	Impact of Terrorism
GSI Government Response	Undernourishment		Acceptance of Minorities	Internal Conflicts Fought
	Social Safety Net (0.7023)	Gini Coefficient		
Political Rights	Ability to Borrow Money	Confidence in Judicial Systems		
Regulatory Quality	Tuberculosis			
Access to Clean Water (0.5625)	Access to Clean Water (0.6366)			
Violent Crime (0.5462)		Violent Crime (0.5980)		
Weapons Access (0.7040)		Weapons Access (0.4533)		
Same Sex Rights (0.6218)			Same Sex Rights (0.4467)	
Disabled Rights				
Internally Displaced Persons (0.6976)				Internally Displaced Persons (0.4500)
Women's Physical Security				

With reference to the initial dimension headings presented in Table 8, decisions were then made regarding placement of variables, which loaded onto multiple dimensions (variables indicate the final placement and italicised variables indicate multiple loadings), and the dimension headings were refined. The final dimension headings and final placement of variables are set out in Table 9.

TABLE 9
Final Dimension headings and final variable placement

Factor One (5.76 Eigen) Governance Issues	Factor Two (3.422 Eigen) Lack of Basic Needs	Factor Three (2.233 Eigen) Inequality	Factor Four (2.092 Eigen) Disenfranchised Groups	Factor Five (1.938 Eigen) Effects of Conflict
Political Instability	Cell Phone Users	Ability to Obtain Emergency Funds	Acceptance of Immigrants	Impact of Terrorism
GSI Government Response	Undernourishment	Violent Crime (0.5980)	Acceptance of Minorities	Internal Conflicts Fought
Women's Physical Security	Social Safety Net (0.7023)	Gini Coefficient	Same Sex Rights (0.4467)	Internally Displaced Persons (0.4500)
Political Rights	Ability to Borrow Money	Confidence in Judicial		
Regulatory Quality	Tuberculosis			
Disabled Rights	Access to Clean Water (0.6366)			
Weapons Access (0.7040)				

The following decisions were made on final dimension placements for variables that had multiple loadings (Table 10). As recommended by our Expert Working Group, these decisions were taken to ensure a level of conceptual clarity across the set of variables within each overall dimension. Table 10 also includes a brief explanation of the rationale behind the subsequent conceptualisation of each dimension.

Table 10
Final Dimension Placement Rationales

Variables	Dimension placement and rationale
Water	Water was placed in Factor Two (Lack of Basic Needs) due to conceptual consistency with other variables within the dimension as conceptualised (covering issues such as access to food and health) despite its slightly higher factor loading on Factor One.
Violent Crime	Violent Crime remains in Factor Three (Inequality) due to its higher factor loadings and greater conceptual clarity with other variables in that dimension as conceptualised. That is, this variable represents a qualitative assessment of the problems posed by violent crime for government and business, reflecting a government's capacity to address crime. Violent crime often disproportionately affects individuals in a society, often consistent with other sociological markers of inequality. <sup>20</sup>
Weapons Access	Weapons Access remains in Factor One (Governance) due to its higher factor loadings and greater conceptual clarity within that dimension. That is, this variable represents a qualitative assessment of the ease of access to weapons, essentially reflecting legislation and regulatory requirements.
Same Sex Rights	Despite the slightly higher factor loadings for Factor One, Same Sex Rights remains placed in Factor Four (Disenfranchised Groups) due to conceptual consistency with the other variables on Immigrants and Minorities in that dimension.
Displaced	Despite the slightly higher factor loadings for Factor One, Displaced remains in Factor Five (Effects of Conflict) alongside variables on refugees and impact of terrorism, for greater conceptual clarity within that dimension as conceptualised.

The Governance Issues dimension was constructed to represent elements of vulnerability strongly linked to government intervention and regulation. Both Weapons Access and Women's Physical Security fit within Governance Issues because they essentially measure a government's ability to provide for the safety of its population. The Women's Physical Security scale takes into account the presence and enforcement of laws against domestic violence, rape and marital rape, the existence of taboos or norms against reporting these crimes, and the occurrence of honour killings and femicide. The presence and enforcement of laws against domestic violence, rape, marital rape, and the comfort of the public in reporting these crimes and whether honour killings/femicide occur (basically if they can occur without penalty), all fit within Governance Issues as consistently defined with Government Response measures. Weapons Access is also a qualitative assessment of the ease of access to weapons, both small and light weapons, essentially reflecting government legislation and regulation requirements. Regulatory Quality evaluates the ability of governments to foster private sector development, and Political Instability measures how well a country's political institutions can support the needs of its citizens, businesses, and overseas investors. Additionally, there is a strong rationale for including Disabled Rights in this dimension because some of the criteria for people to find an area is a good place to live for those with intellectual abilities also has to do with government intervention on their behalf and overall legal protections for these populations.

The label "Lack of basic needs" was applied to Dimension Two upon consideration of the variables that loaded on this dimension and commonalities between them. The Lack of basic needs dimension was developed to reflect variables of Cell Phone Users (an issue of Access), Undernourishment (an issue of Nourishment), Social Safety Net (an issue of Access), Ability to Borrow Money (issues of Access and possibly of Nourishment if needed for sustenance), Tuberculosis (an issue of Access to healthcare), and Access to Clean Water (an issue of Nourishment). Access refers to access to clean water, access to borrowed funds, and access to cell phones. Nourishment is reflected by health (Tuberculosis), undernourishment (lack of food/ nourishment), and social safety net (lack of access). Access as operationalised in this dimension is conceptualised by an ability to obtain necessary goods/services.

The Inequality dimension reflects developments from sociology that suggest that inequality is often a driving force behind populations that are disproportionately affected by violent crime and ability to access funds/emergency funds.<sup>21</sup> The Gini Coefficient measure is a direct measure of financial inequality in a nation. Confidence in Judicial Systems can also be impacted by ability to access or pay for legal representation.

The Disenfranchised Groups dimension measures general acceptance of different racial and ethnic minority groups, immigrants, and same sex groups in a population.

The Effects of Conflict dimension measures impact of terrorism, internal conflicts fought, and internally displaced persons as manifestations of the effects of conflict globally.

#### Phase 7: Missing data solutions

In reviewing the approach we took to missing data in previous iterations of the Vulnerability Model, experts recommended that we consider alternative forms of imputation to avoid dimension level imputation. This led to two changes: (1) imputation of regional averages for missing variable data points when needed and (2) the setting of a threshold for missing data to determine when imputation would be performed.

Regional average values for vulnerability variables allowed us to impute missing vulnerability scores on a given dimension by using data from similar countries in a given geographic area.

Further, a threshold was set for missing data, such that imputation was undertaken for all dimensions/factors where data were missing on 50 percent of the total number of variables in Dimensions Three, Four, and Five, and a 51 percent missing data threshold was applied on Dimensions One and Two. In Dimensions One and Two, this rule was applied for of Libya, Qatar, Somalia, and South Sudan in Dimension Two: Lack of basic needs, due to the larger number of total vulnerability variables included in the first two dimensions of vulnerability. Dimension One: Governance Issues also had a 51 percent or above missing data threshold applied, but no countries in this dimension required imputation for missing data due to this stricter requirement. There were several cases where imputation was deliberately not employed and missing data percentages of 66 percent or 25 percent were retained for certain countries on specific dimensions in order to maintain variability within the regions where some data may have been more limited.

Each instance of missing data at the dimension level is catalogued in Tables 11 and 12.

Table 11 Countries with 100 percent missing data on a dimension

Factor	Country
Factor Three: Inequality	Barbados
ractor rinee. mequanty	Brunei
	Suriname
Factor Four:	Algeria
Disenfranchised Groups	Aigend
	Angola
	Barbados
	Brunei
	Burundi
	Cape Verde
	China
	Cuba
	Djibouti
	Equatorial Guinea
	Eritrea
	Gambia
	Guinea-Bissau
	Guyana
	Jamaica
	Laos
	Namibia
	Korea, Democratic People's Republic of (North Korea)
	Oman
	Papua New Guinea
	Qatar
	Sudan
	Suriname
	Swaziland
	Timor-Leste
	Trinidad and Tobago
	Syria
	Mozambique
	Malaysia
	Sri Lanka
Factor Five: Effects of Conflict	Luxembourg

Table 12
Countries with 50 percent to 99 percent missing data on a dimension

Factor	Country
Factor One: Governance Issues	Barbados Brunei Hong Kong, China
Factor Two: Lack of Basic Needs	Kosovo
	Taiwan
	Libya*not imputed at 50 percent due to greater number of variables on Factor Two
	Qatar*not imputed at 50 percent due to greater number of variables on Factor Two
	Somalia*not imputed at 50 percent due to greater number of variables on Factor Two
	South Sudan*not imputed at 50 percent due to greater number of variables on Factor Two
Factor Three: Inequality	Algeria
	Bahrain*reduced to 25 percent missing data
	Cape Verde
	Cuba
	Djibouti
	Equatorial Guinea
	Eritrea
	Gambia
	Guinea-Bissau
	Guyana
	Hong Kong
	Jamaica
	Jordan*reduced to 25 percent missing data
	Kuwait*reduced to 25 percent missing data
	Laos
	Libya
	Morocco
	Mozambique
	Myanmar
	Korea, Democratic People's Republic of (North Korea)
	Oman*reduced to 25 percent missing data

#### Table 12 continued.

Factor	Country
	Papua New Guinea
	Qatar*reduced to 25 percent missing data
	Saudi Arabia*reduced to 25 percent missing data
	Suriname
	Swaziland
	Syria*reduced to 25 percent missing data
	Timor-Leste
	Trinidad and Tobago
	Turkmenistan
	United Arab Emirates*reduced to 25 percent missing data
	Uzbekistan
Factor Four: Disenfranchised Groups	Bahrain*maintained at 66 percent missing data
	Algeria*maintained at 66 percent missing data
	Angola
	Oman*maintained at 66 percent missing data
	Qatar*maintained at 66 percent missing data
	Syria*maintained at 66 percent missing data
	Egypt*maintained at 66 percent missing data
	Barbados
	Trinidad and Tobago
	Cuba
	Jamaica
	Equatorial Guinea
	Angola
	Burundi
	Eritrea
	Mozambique
	Djibouti
	Korea, Democratic People's Republic of (North Korea)
	China

Factor	Country
ructor	
	Sudan*maintained at 66 percent missing data
	Papua New Guinea
	Guyana
	Suriname
	Brunei
	Laos
	Timor-Leste
	Malaysia
	Swaziland
	Namibia
	Sri Lanka
	Gambia
	Guinea-Bissau
	Cape Verde
	Iran
	Iraq*maintained at 66 percent missing data
	Jordan*maintained at 66 percent missing data
	Kuwait*maintained at 66 percent missing data
	Lebanon*maintained at 66 percent missing data
	Libya*maintained at 66 percent missing data
	Morocco*maintained at 66 percent missing data
	Saudi Arabia*maintained at 66 percent missing data
	Turkmenistan
	United Arab Emirates*maintained at 66 percent missing data
	Yemen*maintained at 66 percent missing data
Factor Five: Effects of Conflict	Barbados
	Brunei
	Cape Verde
	Hong Kong
	Suriname
	Luxembourg

#### Phase 8: Eigenvalue weighting by factor

We calculated the unweighted and eigenvalue weighted vulnerability scores after consultation with our Expert Working Group and strong recommendations to give more weight to factors that have the most explanatory power in our overall vulnerability score. That is, the factors are not equal and eigenvalues indicate the amount of variance explained by a certain factor. Factors or dimensions with greater eigenvalues explain more of the overall model and can be weighted accordingly in the overall vulnerability score.

After calculating the unweighted averages across factors (simple Average calculation function) and the Unweighted Overall Vulnerability Score (Factor 1 Average + Factor 2 Average + Factor 3 Average + Factor 4 Average + Factor 5 Average) divided by five factors, the following formula was then employed to determine the eigenvalue weighted vulnerability scores:

#### Eigenvalue weighting value formula

#### Eigenvalue Weighting Formula:

(((Factor 1 Average\*5.76)+(Factor 2 Average\*3.422)+ (Factor 3 Average\*2.233)+(Factor 4 Average\*2.092)+ (Factor 5 Average\*1.938))/(5\*5.76\*3.422\*2.233\*2.092\* 1.938))\*100 = Eigenvalue Weighted Value

#### Normalisation of Eigenvalue Weighted Variable:

Normalisation: Normalised Value = 1+(Reported Value – minimum value)\*(100-1)/(maximum value – minimum value)

Ultimately, we decided to proceed with the eigenvalue weighted values because it provided appropriate context for the relative importance and strength of factors rather than treating them all as equally important.

#### Phase 9: Quality assurance checks

A final step prior to finalising the 2018 Vulnerability Model involved turning over all data to Ernst and Young, <sup>22</sup> which conducted quality assurance checks on the transcription of vulnerability data from the original sources, the exported data files from Stata, and the final Excel files in order to confirm the data underpinning our 2018 Vulnerability Model is error-free.

# Description of variables in final model by dimension

The final dimensions and variables are presented in Table 13. The resulting vulnerability scores are listed in Table 14 for 167 countries. Detailed descriptions of all retained variables and relevant sources are listed in Table 15.

Table 13
2018 Vulnerability Model

Governance issues	Lack of Basic Needs	Inequality	Disenfranchised groups	Effects of conflict
Political Instability	Cell Phone Users	Ability to Obtain Funds	Acceptance of Immigrants	Impact of Terrorism
GSI Government Response	Undernourishment	Violent Crime	Acceptance of Minorities	Internal Conflicts Fought
Women's Physical Security	Social Safety Net	Gini Coefficient	Same Sex Rights	Internally Displaced Persons
Political Rights	Ability to Borrow Money	Confidence in Judicial Systems		
Regulatory Quality	Tuberculosis			
Disabled Rights	Access to Clean Water			
Weapons Access				



"I delivered my only child in the jungle three days ago. My pain started while fleeing from our house. Shouting from the pain, I collapsed by the roadside. Three women who were also running came forward to help me. They covered me with banana leaves and helped me to give birth to my baby. When our house was burned to ashes by the Myanmar military, I walked mile-after-mile with my nine-month pregnancy. Everything we carried was taken from us for the river crossing to Bangladesh. I have no idea where my husband is and maybe he has already been killed by the Myanmar army and my son has already lost his father. Just like he has lost his country." Sajeda, 25. Bangladesh, Cox's Bazar, Balukhali makeshift refugee camp.

Photo credit: GMB Akash

Table 14 Vulnerability to modern slavery by dimension for 167 countries

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Central African Republic	85.4	50.2	62.7	58.0	81.6	100.0
South Sudan	75.7	51.1	62.9	56.1	85.7	94.7
Afghanistan	81.0	41.3	64.7	46.0	92.6	93.9
Syrian Arab Republic	85.6	36.9	62.5	33.4	95.4	92.3
Congo, Democratic Republic of	77.2	50.8	55.6	46.5	86.7	91.7
Somalia	80.6	56.8	49.6	22.7	88.4	89.5
Sudan	80.7	46.6	42.4	37.0	87.4	87.1
Yemen	79.2	43.1	49.2	53.0	69.9	86.4
Iraq	72.6	34.9	65.2	46.6	89.4	85.7
Chad	71.8	43.2	48.5	46.5	46.1	74.9
Pakistan	56.8	36.2	45.9	55.3	92.8	74.1
Nigeria	54.1	41.3	50.2	47.1	95.5	74.1
Korea, Democratic People's Republic of	87.6	52.0	30.3	32.4	12.3	73.3
Libya	81.4	23.0	49.6	28.1	63.1	73.1
Burundi	72.4	42.6	42.1	48.1	41.7	72.9
Kenya	55.1	48.7	49.6	44.5	66.8	70.6
Guinea-Bissau	77.8	40.1	47.6	44.1	17.1	70.5
Cameroon	65.9	36.5	46.2	46.3	53.9	69.6
Haiti	62.4	49.7	54.1	56.8	20.1	69.6
Eritrea	71.0	50.6	33.7	48.1	25.9	69.6
Congo	75.1	37.6	48.5	46.1	19.6	69.2
Zimbabwe	66.3	45.5	36.6	53.0	25.3	66.4
Guinea	68.3	32.4	54.7	46.4	28.6	66.3
Myanmar	58.1	43.8	26.1	46.0	70.2	65.9
Niger	61.9	41.2	37.0	45.0	50.4	65.6
Swaziland	69.9	50.0	39.4	38.8	11.7	64.8
Ethiopia	62.4	47.5	27.3	34.6	55.3	64.5
Cambodia	66.3	38.5	41.6	56.7	14.8	63.5
Malawi	55.4	51.5	40.9	61.5	19.1	63.4
Iran, Islamic Republic of	74.6	25.5	35.8	37.3	39.5	63.3
Angola	60.2	43.4	48.2	48.5	19.8	62.3
Mauritania	67.3	33.7	39.3	50.5	22.3	62.0
Madagascar	54.4	46.8	51.0	56.8	17.3	62.0
Papua New Guinea	64.8	63.3	46.2	9.5	13.3	61.9
Rwanda	56.6	40.8	40.0	55.7	34.0	61.7
Equatorial Guinea	68.4	40.8	36.7	48.5	10.1	61.7
Togo	70.0	31.5	45.3	42.3	17.1	61.3
Djibouti	66.8	38.0	33.9	48.1	21.3	61.2
Uganda	52.8	48.3	38.2	50.3	35.3	60.8
Tanzania, United Republic of	55.5	47.3	34.9	52.7	29.1	60.5
Egypt	61.6	18.4	44.2	52.8	51.1	60.4
Philippines	50.5	35.3	45.7	36.4	69.3	60.2
Liberia	55.0	44.0	44.1	54.9	18.2	59.3
Lebanon	59.1	22.6	48.1	44.8	47.8	58.9
Gambia	66.8	28.1	41.8	44.1	20.8	58.4
Lesotho	53.8	50.7	44.6	41.9	18.6	58.3
Turkmenistan	80.2	21.5	31.4	32.6	15.9	58.1
Venezuela, Bolivarian Republic of	65.1	19.7	60.4	34.3	27.8	57.9
Lao People's Democratic Republic	70.7	35.1	26.4	41.2	13.9	57.5
Mexico	47.3	23.7	59.0	37.8	68.8	57.3
Côte d'Ivoire	59.5	30.1	41.7	37.5	40.9	57.2
Mozambique	48.6	48.3	40.5	48.1	30.0	57.0
Mali	55.3	24.4	35.5	35.9	66.3	55.9

Table 14 continued.

Country	Governance issues	Lack of basic	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
						_
Tajikistan	67.4 55.5	30.9 26.5	32.8 58.9	27.8 36.5	30.1 32.7	55.8 55.5
Honduras India	46.2	29.8	32.4	41.1		55.5
Zambia	45.8	54.4	44.9	49.1	80.0 13.1	55.2
	50.9	46.1	41.2	48.1	18.1	55.2
Sierra Leone Ukraine	54.0	15.9	46.4	39.0	62.2	54.4
South Africa	46.7	38.3	61.0	36.9	26.9	53.8
Burkina Faso	58.4	31.6	40.3	35.2	26.2	53.6
Timor-Leste	58.4	41.9		41.2	3.9	52.8
Cuba	60.2	25.9	37.2 37.6	47.8	17.3	52.4
Ghana	52.6	29.1	42.0	53.7	21.6	52.4
Guatemala	51.0	25.8	58.1	40.9	27.4	52.2
	63.2	17.9		37.0	43.6	52.0
Algeria	45.7	19.2	27.8 56.4	32.6	63.5	51.6
Colombia Russia	59.3	13.5	38.6	34.1	51.9	51.6
Turkey	47.0	22.2	47.0	48.6	47.9	51.6
Thailand	50.9	21.8	35.3	45.1	51.9	51.6
El Salvador	50.5	23.0	59.8	43.6	22.7	50.7
China	61.4			32.4	44.2	50.7
Indonesia	43.7	20.5 38.0	26.9 35.8	53.3	32.2	50.5
	68.7	20.5		33.4	6.4	50.5
Oman	54.1	38.4	37.8 25.7	20.9	45.3	50.0
Bangladesh	57.9	15.7	41.8	47.4	26.2	49.9
Jordan						
Bahrain	63.0	25.8	34.5	24.0	25.4	49.6
Gabon	56.5	27.1	36.6	47.5	12.4	49.1
Morocco	60.7	18.8	38.1	35.7	22.0	48.3
Namibia	44.6	38.4	55.9	38.8	10.4	48.1
Azerbaijan	60.3	21.2	23.9	35.7	32.5	47.8
Uzbekistan	71.7	20.3	32.6	9.0	18.0	47.5
Belarus	64.9	16.7	23.9	39.4	20.8	47.3
Brunei Darussalam	53.5	30.9	31.7	41.2	18.2	47.2
Bosnia and Herzegovina	52.0 63.2	16.4	31.7 30.1	50.7 14.2	34.1	46.4 46.3
Saudi Arabia	43.9	21.9 34.8		41.0	32.2 30.9	46.3
Senegal			35.6			
Kuwait  Macedonia, the former Yugoslav	59.7	20.1	29.3	29.3	28.5	45.9
Republic of	48.4	17.4	42.5	50.6	27.3	45.6
Guyana	49.5	25.6	60.4	28.1	12.4	45.4
Albania	46.0	20.7	44.3	48.4	27.0	45.2
Benin	51.1	28.8	39.9	35.3	15.8	45.0
Cape Verde	48.7	19.7	44.1	44.1	22.1	44.5
Peru	44.3	24.7	48.0	38.2	27.5	44.3
Jamaica	39.5	24.2	62.2	47.8	15.5	44.2
Nepal	52.0	35.6	32.2	8.7	34.7	44.1
Bolivia, Plurinational State of	50.9	25.8	46.3	32.1	13.4	44.1
Nicaragua	48.2	24.5	43.3	35.3	22.8	43.9
Kosovo	53.1	16.0	39.3	49.7	12.0	43.8
Armenia	51.1	18.9	33.8	46.3	22.1	43.6
Mongolia	40.9	36.8	35.1	47.1	18.1	43.5
Kazakhstan	60.4	14.5	25.1	38.2	19.5	43.3
Dominican Republic	42.5	28.7	46.1	38.8	21.8	43.1
Kyrgyzstan	49.6	19.7	35.4	42.6	23.2	42.8
Sri Lanka	44.1	27.0	33.5	34.9	35.9	42.5
Botswana	43.3	37.9	37.3	37.6	9.7	42.1
Suriname	55.5	10.7	50.8	28.1	16.3	42.1

Table 14 continued.

Barbados	Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Molecus   Mole	Barbados	47.6	14.3	52.5	47.8	9.2	41.9
Vertamm	Moldova, Republic of	42.0	22.9	35.3	58.3	18.1	41.6
Paraguay   48.0   23.0   46.4   29.1   23.0   41.1   29.1   23.0   41.1   29.1   23.0   41.1   29.1   23.0   41.1   29.1   27.8   39.2   28.1   39.2   28.1   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.2   39.							
Paraguay	Ecuador						
Malaysia   36.2   28.4   39.6   41.2   27.8   39.2   Georgia   47.2   15.4   33.9   34.9   31.4   39.2   Georgia   41.5   19.3   33.9   43.9   31.4   39.2   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Tinidal and Tobago   38.6   13.0   62.4   47.8   58.0   33.6   37.1   Tinidal and Tobago   38.6   14.4   36.4   56.0   33.6   37.1   Tinidal and Tobago   38.8   19.1   27.5   48.5   38.6   36.4   Penama   44.2   21.0   42.6   33.1   9.4   36.4   Penama   44.1   31.1   31.5   56.2   19.8   24.0   36.4   Penama   44.1   31.1   31.5   56.2   19.8   24.0   36.4   Rorall   39.1   15.2   31.6   40.9   27.5   33.9   Serbia   39.1   15.2   31.6   40.9   27.5   33.9   Croetia   39.1   39.2   42.7   31.6   40.9   27.5   33.9   Romania   39.3   14.7   43.3   48.3   12.2   32.7   Bulgaria   33.0   14.7   43.3   48.3   12.2   32.7   Bulgaria   33.0   14.7   43.3   48.3   13.4   29.8   Estonia   39.3   11.4   45.0   23.6   13.4   29.8   Estonia   39.3   11.4   45.0   23.6   13.4   29.8    Costa Rica   39.2   15.7   40.7   29.4   12.2   28.4   Italy   31.7   14.4   49.4   31.0   21.4   27.2   United Arab Emirates   47.9   15.1   24.7   7.8   11.9   26.8   Estonia   29.2   15.4   35.6   46.3   9.7   26.2   Ching Kong, China   39.3   14.8   30.0   31.5   31.0   Estonia   29.2   15.4   35.6   46.3   9.7   26.2   Ching Kong, China   29.5   13.8   30.0   31.1   12.2   21.2   United Arab Emirates   47.9   15.1   24.7   27.5   99.6   31.6   Hungary   23.9   48.8   30.0   31.1   12.2   21.2   Estonia   24.4   16.6   30.6   45.6   6.4   20.1   Uruguy   31.9   15.5   13.7   37.5   99.6   31.6   31.6   Hungary   23.9   48.8   31.5   31.1   12.2   21.2   Estonia   17.2   18.3   31.5   15.1   14.2   21.2   Eston							
Tunisle   47.2   15.4   34.8   31.9   33.7   39.2   Georgia   41.5   93.0   62.4   47.8   33.7   39.1   Trinidad and Tobago   38.6   33.0   62.4   47.8   33.7   39.1   Trinidad and Tobago   38.6   33.0   62.4   47.8   33.7   Sorece   38.5   14.4   36.4   56.0   23.6   32.1   Israel   35.8   19.1   27.5   48.5   38.6   36.4   Panama   44.2   21.0   42.6   33.1   9.4   36.4   Montenegro   39.4   15.0   37.4   50.9   18.3   35.8   Sorbla   39.1   15.2   31.6   40.9   27.5   33.9   Romania   35.8   19.5   32.6   52.0   16.1   33.9   Romania   35.8   19.5   32.6   52.0   16.1   33.9   Romania   33.0   14.7   43.3   44.1   17.4   31.3   Korea, Republic of   33.9   29.4   25.7   33.8   31.4   29.8   Bulgaria   33.0   14.7   45.3   46.1   17.4   29.2   Argentina   39.3   11.4   45.0   22.6   31.4   28.9   Costa Rica   39.3   11.4   45.0   22.6   31.4   28.9   Costa Rica   39.3   11.4   45.0   22.6   31.4   28.9   Costa Rica   39.3   11.4   45.0   23.6   31.4   28.9   Costa Rica   39.3   11.4   45.0   23.6   31.4   28.8   Costa Rica   29.9   15.1   29.9   51.2   14.2   27.2   Chile   22.5   15.4   35.6   46.3   9.7   26.2   Chile   28.5   37.7   77.5   59.6   36.8   Chile   29.5   15.4   29.2   38.8   Chile Mary   31.7   14.4   45.4   31.0   93.   Costa Rica   29.9   15.1   29.9   51.2   14.2   Chile Arab Emirates   47.9   15.1   29.9   51.2   14.2   Chile Arab Emirates   47.9   15.1   29.9   51.2   14.2   Chile Arab Emirates   47.9   15.1   29.9   31.2   31.4   Chile Arab Emirates   47.9   15.1   29.9   31.5   31.0   Chile Arab Emirates   47.9   31.3   31.5   31.5   Chi	- '						
Georgia   415   19.3   33.9   43.9   31.4   39.2     Trinidad and Tobago   38.6   33.0   62.4   47.8   13.7   39.1     Oator   56.3   31.8   29.5   33.4   7.0   37.7     Greece   38.5   14.4   36.4   56.0   23.6   37.1     Israel   35.8   19.1   27.5   48.5   38.6   36.4     Panama   44.2   21.0   42.6   33.1   9.4   36.4     Panama   44.2   21.0   42.6   33.1   9.4   36.4     Brazil   43.1   13.6   56.2   19.8   24.0   36.4     Montenegro   39.4   15.0   37.4   50.9   18.3   35.8     Serbia   39.1   15.2   31.6   40.9   27.5   33.9     Romania   35.8   19.5   32.6   52.0   16.1   33.9     Croatlo   35.7   20.2   34.1   48.3   12.2   32.7     Bulgaria   33.0   14.7   43.3   44.1   17.4   31.3     Korea, Republic of   33.9   29.4   25.7   33.8   13.4   29.8     Estonia   35.2   13.7   27.4   52.2   12.4   29.2     Argentina   39.3   11.4   45.0   23.6   13.4   28.9     Estonia   35.2   13.7   27.4   52.2   12.4   29.2     Costa Rica   39.3   14.4   45.0   23.6   13.4   28.9     Costa Rica   39.3   14.4   45.0   23.6   13.4   28.9     Costa Rica   39.2   15.1   29.9   51.2   14.2   22.2     United Arab Emirates   47.9   15.1   29.9   51.2   14.2   22.2     United Arab Emirates   29.9   15.1   29.9   51.2   14.2   22.2     United Arab Emirates   39.3   19.4   35.6   46.3   9.7   26.2     Chile   28.5   13.8   50.0   23.5   20.3   28.6     Hong Kong, China   39.3   9.6   24.7   28.4   15.0   24.7     Latvia   31.7   15.9   23.8   44.0   10.3   24.6     Poland   24.5   13.7   27.5   59.6   31.6   24.7     Latvia   25.5   17.7   33.6   31.1   12.2   12.2     Latvia   27.1   28.4   29.9   28.8   49.0   10.3   24.6     Poland   24.5   24.7   40.6   21.1   14.4   20.3     Slowania   22.4   16.6   30.6   45.6   6.4   20.1     Uruguay   31.9   13.5   34.3   15.4   9.5   19.7     Cyeck Republic   25.1   13.9   21.0   37.1   18.2   19.1     Uruguay   27.5   13.8   15.0   27.5   13.9   17.8   13.8     Singapore   30.8   16.3   50.0   29.9   19.3   12.3   13.4     Belgium   20.0   15.0   29.9   15.1   12.4   27.8     United							
Trinidad and Tobago   38.6   13.0   62.4   47.8   13.7   39.1   Oatar   56.3   13.8   29.5   33.4   70   37.7   Greece   38.5   14.4   36.4   56.0   23.6   37.1   Israel   35.8   19.1   27.5   48.5   38.6   36.4   Brazil   44.2   21.0   42.6   33.1   9.4   36.4   Brazil   43.1   13.6   56.2   19.8   24.0   36.4   Montrergo   39.4   15.0   37.4   50.9   18.3   35.8   Serbia   39.1   15.2   31.6   40.9   27.5   33.9   Romania   35.8   19.5   32.6   52.0   16.1   33.9   Creatia   35.7   20.2   34.1   48.3   12.2   22.7   Bulgarla   33.0   14.7   43.3   44.1   17.4   31.3   Korea, Republic of   33.9   29.4   25.7   33.8   13.4   29.8   Estonia   35.2   13.7   27.4   52.2   12.4   29.2   Argentina   39.3   11.4   45.0   23.6   13.4   28.9   Costa Rica   35.5   16.7   40.7   29.4   12.2   28.4   Italy   31.7   14.4   45.4   31.0   19.3   28.3   Slowakia   29.9   15.1   24.7   7.8   19.9   United Arab Emirates   47.9   15.1   24.7   7.8   11.9   26.8   United Arab Emirates   47.9   15.1   24.7   7.8   11.9   26.8   United Arab Emirates   47.9   15.1   24.7   7.8   11.9   26.8   Hong Kong, China   39.3   9.6   24.7   28.4   15.0   24.7   Latvia   31.7   15.9   23.8   44.0   10.3   24.6   Hong Kong, China   29.2   15.4   35.6   46.3   9.7   26.2   Chile   28.5   13.8   50.0   23.5   20.3   25.6   Hong Kong, China   24.5   13.7   27.5   59.6   36.6   Hong Kong China   24.6   66.6   30.6   45.6   64.5   64.5   Hungary   31.9   13.5   34.3   15.5   31.9   13.1   Slovenia   24.5   13.7   24.7   24.8   24.2   Tulvian China   24.6   25.1   39.9   21.0							
Catar         56.3         13.8         29.5         33.4         7.0         37.7           Greece         38.5         14.4         36.4         56.0         23.6         37.1           Israel         35.8         191         27.5         48.5         38.6         36.4           Panama         44.2         21.0         42.6         33.1         9.4         36.4           Montenego         39.4         15.0         37.4         50.9         18.3         35.8           Serbia         39.1         15.2         31.6         40.9         27.5         33.9           Croatia         35.7         20.2         34.1         48.3         12.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3         43.4         29.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3         42.2         32.7         33.8         13.4         29.8         25.7         33.8         13.4         29.8         25.2         12.4         29.2         12.4         29.2         12.4         29.2         12.4         29.2         1	_						
Greece   38.5   14.4   36.4   56.0   23.6   37.1	-						
Israel   35.8   19.1   27.5   48.5   38.6   36.4   Paname   44.2   21.0   42.6   33.1   9.4   36.4   36.4   Montenegro   39.4   15.0   37.4   50.9   18.3   35.8   Serbia   39.1   15.2   31.6   40.9   27.5   33.9   Romania   35.8   19.5   32.6   52.0   16.1   33.9   Croatia   35.7   20.2   34.1   48.3   12.2   32.7   32.8   Serbia   33.0   14.7   43.3   44.1   17.4   31.3   Korea, Republic of   33.9   29.4   25.7   33.8   13.4   29.8   Estonia   35.2   13.7   27.4   52.2   12.4   29.2   29.4   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.8   29.9   29.9   29.9   29.8   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9   29.9							
Paname         44.2         21.0         42.6         33.1         9.4         36.4           Brazil         43.1         13.6         56.2         19.8         24.0         36.4           Montenegro         39.4         15.0         37.4         50.9         18.3         35.8           Serbia         39.1         15.2         31.6         40.9         27.5         33.9           Croatis         35.7         20.2         34.1         48.3         12.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovekia         29.9         15.1         29.							
Brazil         43.1         13.6         56.2         19.8         24.0         36.4           Montenegro         39.4         15.0         37.4         50.9         18.3         35.8           Serbia         39.1         15.2         31.6         40.9         27.5         33.9           Romanie         35.8         19.5         32.6         52.0         16.1         33.9           Croatla         35.7         20.2         34.1         48.3         12.2         32.7           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rice         35.2         16.7         40.7         29.4         12.2         28.2           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.7         7.8         11.9         26.8           Linburd         29.							
Montenegro         39.4         15.0         37.4         50.9         18.3         35.8           Serbia         39.1         15.2         31.6         40.9         27.5         33.9           Romania         35.8         19.5         32.6         52.0         16.1         33.9           Croatia         35.7         20.2         34.1         48.3         12.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         29.8           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         24							
Serbia         39.1         15.2         31.6         40.9         27.5         33.9           Romania         55.8         19.5         32.6         52.0         16.1         33.9           Croatia         35.7         20.2         34.1         48.3         16.1         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Argentina         39.3         16.7         40.7         29.4         12.2         28.2           Italy         31.7         14.4         45.0         30.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1							
Romania         35.8         19.5         32.6         52.0         16.1         33.9           Croatia         35.7         20.2         34.1         48.3         12.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.8           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Stovakia         29.9         15.1         24.7         7.8         11.9         26.8           Italy         31.7         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0 <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-						
Croatia         35.7         20.2         34.1         48.3         12.2         32.7           Bulgaria         33.0         14.7         43.3         44.1         17.4         31.3           Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1         29.9         51.2         14.2         27.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Lutvia         31.7         15.9 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Bulgaria   33.0   14.7   43.3   44.1   17.4   31.3   Korea, Republic of   33.9   29.4   25.7   33.8   13.4   29.8   Estonia   35.2   13.7   27.4   52.2   12.4   29.2   28.4   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.9   29.5   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8   29.8							
Korea, Republic of         33.9         29.4         25.7         33.8         13.4         29.8           Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slowakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Hong Kong, China         23.9 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Estonia         35.2         13.7         27.4         52.2         12.4         29.2           Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.6           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         <	_						
Argentina         39.3         11.4         45.0         23.6         13.4         28.9           Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7							
Costa Rica         35.2         16.7         40.7         29.4         12.2         28.4           Italy         31.7         14.4         45.4         31.0         19.3         28.3           Slovakia         29.9         15.1         29.9         51.2         14.2         27.2           United Arab Emirates         47.9         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chille         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritus         25.5         17.7         33.6         31.1         12.2         21.2           Taiwan, China         24.5         24.7							
Italy							
Siovakia   29.9   15.1   29.9   51.2   14.2   27.2							
United Arab Emirates         47.9         15.1         24.7         7.8         11.9         26.8           Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritus         25.5         17.7         33.6         31.1         12.2         21.2           Talwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         <							
Lithuania         29.2         15.4         35.6         46.3         9.7         26.2           Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.6           Poland         24.5         13.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Talwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         1							
Chile         28.5         13.8         50.0         23.5         20.3         25.6           Hong Kong, China         39.3         9.6         24.7         28.4         15.0         24.7           Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Taiwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Cyprus         24.5         16.7         32.6							
Hong Kong, China   39.3   9.6   24.7   28.4   15.0   24.7     Latvia   31.7   15.9   23.8   44.0   10.3   24.6     Poland   24.5   13.7   27.5   59.6   13.6   24.4     Hungary   23.9   14.8   32.9   48.3   15.5   23.6     Mauritius   25.5   17.7   33.6   31.1   12.2   21.2     Taiwan, China   24.5   24.7   40.6   21.1   1.4   20.3     Slovenia   22.4   16.6   30.6   45.6   6.4   20.1     Uruguay   31.9   13.5   34.3   15.4   9.5   19.7     Cyprus   24.5   16.7   32.6   29.7   10.1   19.1     Czech Republic   25.1   13.9   21.0   37.1   18.2   19.1     United States   18.3   18.2   30.3   15.6   28.6   15.9     France   17.3   15.4   29.4   21.2   28.5   15.3     Japan   21.5   13.1   15.5   31.9   17.8   13.8     Singapore   30.8   16.3   5.0   29.9   19.3   12.3   13.1     Spain   17.2   18.3   33.5   15.1   14.2   12.8     United Kingdom   15.9   15.6   25.1   12.4   27.8   11.1     Germany   15.9   15.0   22.8   15.7   24.7   10.4     Treland   17.2   17.0   24.3   10.9   20.1   10.4     Teland   17.2   15.6   31.7   20.7   9.7   8.5     Luxembourg   17.7   13.7   24.5   12.1   14.3   8.4     Finland   18.6   16.0   15.0   17.8   11.2   8.2     Australia   11.9   15.7   20.7   12.0   13.0   4.3     Australia   11.9   15.7   20.7   12.0   13.0   4.3							
Latvia         31.7         15.9         23.8         44.0         10.3         24.6           Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Talwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5<							
Poland         24.5         13.7         27.5         59.6         13.6         24.4           Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Taiwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.4           Belgium         20.0         15.0         29.9							
Hungary         23.9         14.8         32.9         48.3         15.5         23.6           Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Taiwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.7           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.8           Singapore         30.8         16.3         5.0         18.7         9.0         13.4           Belgium         20.0         15.0         29.							
Mauritius         25.5         17.7         33.6         31.1         12.2         21.2           Taiwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.8           Singapore         30.8         16.3         5.0         18.7         9.0         13.4           Belgium         20.0         15.0         29.9         19.3         12.3         13.1           Spain         17.2         18.3         33.5<	Poland						
Taiwan, China         24.5         24.7         40.6         21.1         1.4         20.3           Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.8           Singapore         30.8         16.3         5.0         18.7         9.0         13.4           Belgium         20.0         15.0         29.9         19.3         12.3         13.1           Spain         17.2         18.3         33.5         15.1         14.2         12.8           United Kingdom         15.9         15.6	Hungary						
Slovenia         22.4         16.6         30.6         45.6         6.4         20.1           Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.8           Singapore         30.8         16.3         5.0         18.7         9.0         13.4           Belgium         20.0         15.0         29.9         19.3         12.3         13.1           Spain         17.2         18.3         33.5         15.1         14.2         12.8           United Kingdom         15.9         15.6         25.1         12.4         27.8         11.1           Germany         15.9         15.0         22.8<	Mauritius			33.6	31.1	12.2	21.2
Uruguay         31.9         13.5         34.3         15.4         9.5         19.7           Cyprus         24.5         16.7         32.6         29.7         10.1         19.1           Czech Republic         25.1         13.9         21.0         37.1         18.2         19.1           United States         18.3         18.2         30.3         15.6         28.6         15.9           France         17.3         15.4         29.4         21.2         28.5         15.3           Japan         21.5         13.1         15.5         31.9         17.8         13.8           Singapore         30.8         16.3         5.0         18.7         9.0         13.4           Belgium         20.0         15.0         29.9         19.3         12.3         13.1           Spain         17.2         18.3         33.5         15.1         14.2         12.8           United Kingdom         15.9         15.6         25.1         12.4         27.8         11.1           Germany         15.9         15.0         22.8         15.7         24.7         10.4           Ireland         17.2         17.0         24.3<	Taiwan, China	24.5	24.7	40.6	21.1	1.4	20.3
Cyprus       24.5       16.7       32.6       29.7       10.1       19.1         Czech Republic       25.1       13.9       21.0       37.1       18.2       19.1         United States       18.3       18.2       30.3       15.6       28.6       15.9         France       17.3       15.4       29.4       21.2       28.5       15.3         Japan       21.5       13.1       15.5       31.9       17.8       13.8         Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6	Slovenia	22.4		30.6		6.4	
Czech Republic       25.1       13.9       21.0       37.1       18.2       19.1         United States       18.3       18.2       30.3       15.6       28.6       15.9         France       17.3       15.4       29.4       21.2       28.5       15.3         Japan       21.5       13.1       15.5       31.9       17.8       13.8         Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7	Uruguay	31.9	13.5	34.3	15.4	9.5	19.7
United States       18.3       18.2       30.3       15.6       28.6       15.9         France       17.3       15.4       29.4       21.2       28.5       15.3         Japan       21.5       13.1       15.5       31.9       17.8       13.8         Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       1	Cyprus	24.5	16.7	32.6	29.7	10.1	19.1
France       17.3       15.4       29.4       21.2       28.5       15.3         Japan       21.5       13.1       15.5       31.9       17.8       13.8         Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0	Czech Republic	25.1	13.9	21.0	37.1	18.2	19.1
Japan       21.5       13.1       15.5       31.9       17.8       13.8         Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1<	United States	18.3	18.2	30.3	15.6	28.6	15.9
Singapore       30.8       16.3       5.0       18.7       9.0       13.4         Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.	France	17.3	15.4	29.4	21.2	28.5	15.3
Belgium       20.0       15.0       29.9       19.3       12.3       13.1         Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Japan	21.5	13.1	15.5	31.9	17.8	13.8
Spain       17.2       18.3       33.5       15.1       14.2       12.8         United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Singapore	30.8	16.3	5.0	18.7	9.0	13.4
United Kingdom       15.9       15.6       25.1       12.4       27.8       11.1         Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Belgium	20.0	15.0	29.9	19.3	12.3	13.1
Germany       15.9       15.0       22.8       15.7       24.7       10.4         Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Spain	17.2	18.3	33.5	15.1	14.2	12.8
Ireland       17.2       17.0       24.3       10.9       20.1       10.4         Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	United Kingdom	15.9	15.6	25.1	12.4	27.8	11.1
Canada       16.6       20.7       20.1       9.2       21.5       10.2         Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Germany	15.9	15.0	22.8	15.7	24.7	10.4
Portugal       12.2       15.6       31.7       20.7       9.7       8.5         Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Ireland	17.2	17.0	24.3	10.9	20.1	10.4
Luxembourg       17.7       13.7       24.5       12.1       14.3       8.4         Finland       18.6       16.0       15.0       17.8       11.2       8.2         Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Canada	16.6	20.7	20.1	9.2	21.5	10.2
Finland         18.6         16.0         15.0         17.8         11.2         8.2           Netherlands         12.8         13.6         26.0         16.0         12.2         6.1           Norway         15.7         17.8         13.1         9.4         10.8         4.5           Australia         11.9         15.7         20.7         12.0         13.0         4.3	Portugal	12.2	15.6	31.7	20.7	9.7	8.5
Finland         18.6         16.0         15.0         17.8         11.2         8.2           Netherlands         12.8         13.6         26.0         16.0         12.2         6.1           Norway         15.7         17.8         13.1         9.4         10.8         4.5           Australia         11.9         15.7         20.7         12.0         13.0         4.3	Luxembourg	17.7	13.7	24.5	12.1	14.3	8.4
Netherlands       12.8       13.6       26.0       16.0       12.2       6.1         Norway       15.7       17.8       13.1       9.4       10.8       4.5         Australia       11.9       15.7       20.7       12.0       13.0       4.3	Finland	18.6	16.0	15.0	17.8		8.2
Norway     15.7     17.8     13.1     9.4     10.8     4.5       Australia     11.9     15.7     20.7     12.0     13.0     4.3	Netherlands	12.8	13.6	26.0	16.0		6.1
Australia         11.9         15.7         20.7         12.0         13.0         4.3	Norway	15.7	17.8	13.1			4.5
	•						
	Sweden	10.2	17.0	17.4	13.0	18.3	4.3

Table 14 continued.

Country	Governance issues	Lack of basic needs	Inequality	Dis- enfranchised groups	Effects of conflict	Overall weighted average
Iceland	20.6	11.7	21.1	4.1	1.8	4.2
Austria	12.6	12.2	18.2	23.5	3.1	3.4
New Zealand	12.2	18.4	16.2	7.0	7.0	1.9
Switzerland	11.6	12.2	15.2	20.1	4.9	1.5
Denmark	8.7	15.3	13.8	15.2	12.5	1.0

Lebanon, Syria. A Syrian sex trafficking victim applies nail polish at her safehouse at an undisclosed location in Lebanon, April 2016, after she fled a brothel in Lebanon where she was being held captive. Lebanese security forces busted a trafficking ring involving 75 Syrian women trafficked to Lebanon from their country and forced into the sex industry.

Photo credit: Stringer/AFP/Getty Images

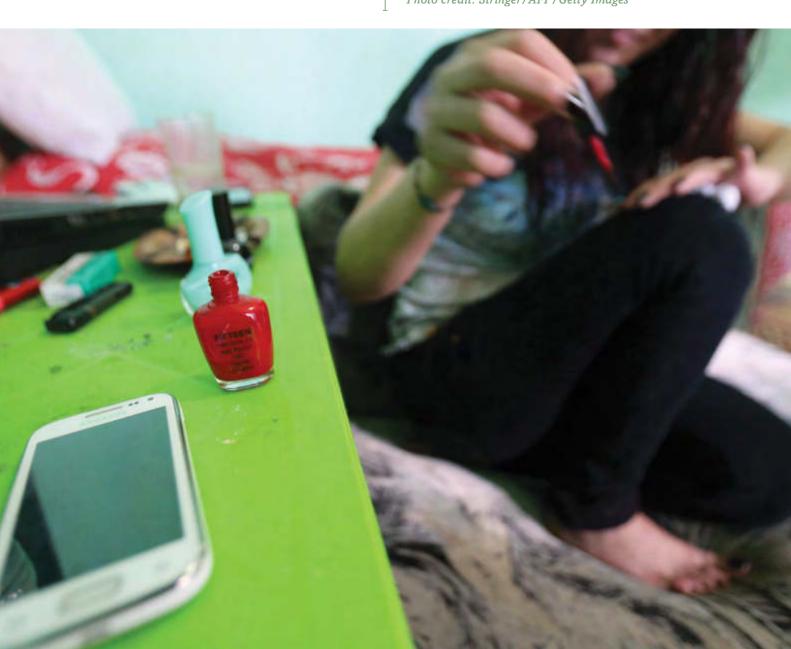


Table 15 Variable descriptions and sources<sup>23</sup>

Factor	Variable Name	Data Description and Source	Variable Description Min-max normalisation has been performed on all variables to ensure comparability via a linear transformation (scale of 1 to 100).
Factor One: Governance Issues	Political Instability	Data are from The Global Peace Index, which measures the level of peace in 162 countries according to 22 qualitative and quantitative indicators aligned with the absences of violence and fear of violence. <sup>24</sup>	This variable represents an assessment of political instability ranked from 1 to 5 (very low to very high instability). This measure is assessed by the Economist Intelligence Unit (EIU) based on five questions relating to the degree to which the country's political institutions are sufficiently stable to support the needs of its citizens, businesses, and overseas investors. This indicator aggregates five other questions on social unrest, orderly transfers, opposition stance, excessive executive authority, and an international tension sub-index. These data are analysed and updated on a quarterly basis. The score provided for March 2014—March 2015 is the average of the scores given for each quarter.
	Weapons Access	Data are from The Global Peace Index, which measures the level of peace on 162 countries according to 22 qualitative and quantitative indicators aligned with the absences of violence and fear of violence. <sup>25</sup>	The variable Weapons Access is a qualitative assessment of the accessibility of small arms and light weapons. This measure ranges from a value of 1, which indicates very low access to weapons, to a value of 5, which indicates very high access to weapons. Data are from 2016.
	Women's Physical Security	Data are from Women Stats. <sup>26</sup>	This variable reflects women's physical security on a range of indicators. It is a multivariate scale derived from WomenStats Database that provides the ordinal ranking of the physical security of women. Data are from variable "MULTIVAR-SCALE-1." The scale takes into account the presence and enforcement of laws against domestic violence, rape and marital rape, the existence of taboos or norms against reporting these crimes, and the occurrence of honour killings and femicide. This scale ranges from 1 "high security" to 4 "low security." Data are from 2014.
	Disabled Rights	Data are from Gallup Analytics, which presents a detailed assessment of global attitudes for more than 100 countries. <sup>27</sup>	The variable Disabled Rights measures the proportionally representative percentage of respondents who responded that their region is "not a good place" in direct response to the question: "Is the city or area where you live a good place or not a good place to live for people with intellectual disabilities?" O represents lower vulnerability, 100 represents higher vulnerability. Select World Poll as Data Source, Good Place for Intellectually Disabled as your Metric, Aggregate Demographics, and Time set to Year 2015. Data are from 2015.
	Government Response GSI	Data are from Global Slavery Index.	The variable Government Response from the Global Slavery Index represents the average evaluation score for each country across five main indicators including: 1) Survivors are Supported, 2) Criminal Justice Responses, 3) Coordination and Accountability, 4) Attitudes, Social Systems, and Institutions, and 5) Business and Government Responses to Modern Slavery in Supply Chains. Each section sub-score is aggregated to provide a response rating. The quantitative evaluation scores are used for each country. Data are from 2016. These values range from 0 representing poor government response to 100 representing strong government response.
	Political Rights	Data are from the Center for Systemic Peace, Polity IV Dataset hosted by the Integrated Network for Societal Conflict Research. <sup>28</sup>	This variable measures governments on a scale from strongly democratic to strongly autocratic. Alt. Political Rights Variable "Polity IV" score is the POLITY2 score reported in the POLITY IV dataset on "Regime Authority Characteristics and Transitions Database" under the Polity IV: Annual Time-Series, 1800-2015 Excel file. This variable modifies the original Polity score that measures the "Combined Polity Score: The POLITY score is computed by subtracting the AUTOC score from the DEMOC score; the resulting unified polity scale ranges from +10 (strongly democratic) to -10 (strongly autocratic). This variable was then inverted to represent increasing risk to slavery through less democratic governance. Data are from 2015.
	Regulatory Quality	Data are from the Worldwide Governance Indicators (WGI). Regulatory Quality is one of six broad dimensions of governance covered by the WGI (others include Voice and Accountability, Political Stability and Absence of Violence/ Terrorism, Regulatory Quality, Rule of Law, Control of Corruption). <sup>29</sup>	The variable Regulatory Quality measures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The variable ranges from approximately -2.5, which indicates low regulatory quality, to a score of 2.5, which indicates high regulatory quality. Data are from 2014.

Table 15 continued.

Factor	Variable Name	Data Description and Source	Variable Description Min-max normalisation has been performed on all variables to ensure comparability via a linear transformation (scale of 1 to 100).
Factor Two: Lack of basic needs	Cell Phone Users	Data are from the World Bank's World Development Indicators. <sup>30</sup>	The variable Cell Phone Users measures the number of cellular subscriptions per 100 people for each country. The indicator includes (and is split into) the number of postpaid subscriptions, and the number of active prepaid accounts (i.e., that have been used during the last three months). The indicator applies to all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging, and telemetry services. Data are from 2015. The potential data values range from 0 out of 100 people in a country to 100 out of 100 people in a country.
	Social Safety Net	Data are from the International Labour Organization's (ILO) World Social Protection Report. <sup>31</sup>	The variable Social Safety Net evaluates countries on their national social security system based on the number of policy areas covering at least one program including total social security provisions available to citizens including protections for sickness, maternity, old age, invalidity, survivors, family allowances, employment injury, and unemployment. Scores range from 0 to 8, where a value of 0 indicates that none of these provisions are provided, and a value of 8 indicates that all of these provisions are provided. Data are from the World Social Protection Report 2014/2015.
	Undernourish- ment	These data are from the Statistics Division of the Food and Agricultural Organization (FAO) of the United Nations. <sup>32</sup>	This variable measures prevalence of undernourishment. The prevalence of undernourishment expresses the probability that a randomly selected individual from the population consumes an amount of calories that is insufficient to cover her/his energy requirement for an active and healthy life. When a value is listed as <5.0, the value is reported as 2.5. Data provided are for 2014-2016. The indicator is measured as a percentage and computed by comparing a probability distribution of habitual daily dietary energy consumption with a threshold level called the minimum dietary energy requirement. Both are based on the notion of an average individual in the reference population. This is the traditional FAO hunger indicator, adopted as official Millennium Development Goal indicator for Goal 1, Target 1.9. It is listed as Dataset V.2 Note: Many of the developed countries that are scored as <5.0, which will translate to a 2.5 value in our dataset, are actually listed beneath the section "Developed Countries" at the end and you must apply this proportion for all of the countries in that category. The indicator is calculated in three year averages, from 1990-92 to 2014-16, to reduce the impact of possible errors in estimated DES, due to the difficulties in properly accounting of stock variations in major food. Data are from 2014-2016. Data in Excel are also available here http://bit.ly/14FRxGV.
	Access to Clean Water	Data are from the World Bank, World Development Indicators. <sup>33</sup>	This variable measures improved water source access as a percentage of the total population. Access to an improved water source refers to the percentage of the population using an improved drinking water source. The improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection). This variable is measured in percentage points of the total population with improved access to water with potential values ranging from 0 to 100 percent of the population.
	Tuberculosis	Data are from the World Bank, World Development Indicators. <sup>34</sup>	This variable measures the incidence of tuberculosis (per 100,000 people). Incidence of tuberculosis is the estimated number of new pulmonary, smear positive, and extra-pulmonary tuberculosis cases. Incidence includes patients with HIV. Data are from 2015.
	Ability to Borrow Money	Data are from World Bank Global FINDEX which provides data on how individuals save, borrow, make payments, and manage risks. The indicators in the 2014 Global Financial Inclusion (Global Findex) database are drawn from survey data covering almost 150,000 people in 143 economies—representing more than 97 percent of the world's population.35	This variable represents the percentage of those age 15+ who borrowed any money in the past year. The percentage of respondents who report borrowing any money for any reason and from any source in the past 12 months. The potential data values range from 100 percent of respondents age 15 and over to 0 percent of respondents who reported borrowing any money for any reason and any source in the past 12 months. Data are from 2014.

Factor	Variable Name	Data Description and Source	Variable Description Min-max normalisation has been performed on all variables to ensure comparability via a linear transformation (scale of 1 to 100).
Factor Three: Inequality	Confidence in Judicial Systems	Data are from Gallup Analytics, which presents a detailed assessment of global attitudes for more than 100 countries. <sup>36</sup>	The variable Confidence in the Judicial System measures the proportionally representative percentage of respondents who responded "no" in direct response to the question: "In this country, do you have confidence in [the] judicial system and courts?" Data are from 2016.
	Violent Crime	Data are from The Global Peace Index, which measures the level of peace in 162 countries according to 22 qualitative and quantitative indicators aligned with the absences of violence and fear of violence. <sup>37</sup>	The variable Violent Crime measures the peacefulness of a society based on the likelihood of violent crime. These data are calculated on a five-point scale, where a value of 1 indicates a country that is "most peaceful," and a value of 5 indicates a country that is "least peaceful." This assessment by the Economist Intelligence Unit (EIU) based on the question, "Is violent crime likely to pose a significant problem for government and/or business over the next two years?" Country analysts assess this question on a quarterly basis. Data are from 2016
	Gini Coefficient	Data are from the World Bank's World Development Indicators. <sup>38</sup>	The variable Gini Coefficient is a measure of income inequality. This measure ranges from a value of 0, which indicates absolute income equality, to 100, which indicates absolute income inequality. Data are from the most recent year in the period 2005 to 2013.
	Ability to Obtain Emergency Funds	Data are from World Bank Global FINDEX which provides data on how individuals save, borrow, make payments, and manage risks. The indicators in the 2014 Global Financial Inclusion (Global FINDEX) database are drawn from survey data covering almost 150,000 people in 143 economies – representing more than 97 percent of the world's population.39	The percentage of respondents age 15+ who report that in case of an emergency it is not at all possible for them to come up with 1/20 of gross national income (GNI) per capita in local currency within the next month. The potential data values range from 100 percent of respondents to 0 percent of respondents reporting that they are capable of coming up with 1/20 of gross national income per capita in their local country within the next month. Data are from 2014.
Factor Four: Disenfranch- ised Groups	Same Sex Rights	Data are from Gallup Analytics, which presents a detailed assessment of global attitudes for more than 100 countries. <sup>40</sup>	The variable Same Sex Rights measures the proportionally representative percentage of respondents who responded that their region is "not a good place" in direct response to the question: "Is the city or area where you live a good place or not a good place to live for gay or lesbian people?" O represents lower vulnerability, 100 represents higher vulnerability. Data are from 2016.
	Acceptance of Immigrants	Data are from Gallup Analytics, which presents a detailed assessment of global attitudes for more than 100 countries. <sup>41</sup>	The variable Acceptance of Immigrants measures the proportionally representative percentage of respondents who responded that their region is "not a good place" in direct response to the question: "Is the city or area you live a good place or not a good place to live for immigrants from other countries?" O represents lower vulnerability, 100 represents higher vulnerability. Data are from 2016.
	Acceptance of Minorities	Data are from Gallup Analytics, which presents a detailed assessment of global attitudes for more than 100 countries. <sup>42</sup>	The variable Acceptance of Minorities measures the proportionally representative percentage of respondents who responded that their region is "not a good place" in direct response to the question: "Is the city or area where you live a good place or not a good place for racial and ethnic minorities?" O represents lower vulnerability, 100 represents higher vulnerability. Data are from 2016.

Table 15 continued.

Factor	Variable Name	Data Description and Source	Variable Description Min-max normalisation has been performed on all variables to ensure comparability via a linear transformation (scale of 1 to 100).
Factor Five: Effects of Conflict	Impact of Terrorism	Data are from the Global Terrorism Index, Institute for Economics and Peace (IEP). <sup>43</sup>	The variable Impact of Terrorism is drawn from the scores calculated for the Global Terrorism Index, which measures the number of deaths, injuries, property damage and psychological impact resulting from terrorism in 162 countries. Data are from the 2016 Global Terrorism Index and is scored on a 1 to 10 scale, where 1 is low impact and 10 represents high impact of terrorism.
	Internal Conflicts Fought	Data are from The Global Peace Index, which measures the level of peace in 162 countries according to 22 qualitative and quantitative indicators aligned with the absences of violence and fear of violence. <sup>44</sup>	This indicator measures the number and duration of conflicts that occur within a specific country's legal boundaries. Information for this indicator is sourced from three datasets from Uppsala Conflict Data Program (UCDP): the Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset. The score for a country is determined by adding the scores for all individual conflicts that have occurred within that country's legal boundaries over the last five years, based on the following factors: 1. Number: a) the number of interstate armed conflicts, internal armed conflict (civil conflict), internationalised internal armed conflicts, one-sided conflict and non-state conflict located within a country's legal boundaries, b) If a conflict is a war (1,000+ battle-related deaths) it receives a score of one; if it is an armed conflict (25-999 battle-related deaths) it receives a score of 0.25. 2. Duration: a) a score is assigned based on the number of years out of the last five that conflict has occurred. For example, if a conflict last occurred five years ago that conflict will receive a score of one out of five. The cumulative conflict scores are then added and banded to establish a country's score. Scores range from 1 out of 5 to 5 out of 5. A score of 1 indicates no internal conflicts and a score of 5 indicates very high levels of internal conflict. Data are from the 2016 Global Peace Index Indicators.
	Internally Displaced Persons	Data are from UNHCR.45	This variable measures the number of displaced persons. These data represent the total number of displaced (internally displaced, returned refugees, asylum seekers, stateless persons) by territory of origin. For 2015 data where an * is used to indicate between 1-4 individuals to protect their identities, we retained the value of 1 person. 0 = low displacement 100 = high displacement of our normalised data, but as reported the data values range from 1 person, which is small displacement, to values over 7,800,000 for the highest displacement in 2014. Data are from 2015.

#### Data limitations

There are several areas of data limitations relevant to our vulnerability model that should be kept in mind as these results are interpreted. These major limitations include: 1) concept-variable consistency or the fit of the vulnerability variables to the real world phenomena they are approximating in our model, 2) data availability, transparency, and publication regularity, 3) lag in administrative data reflecting real world situations on the ground, 4) collinearity checks on our variables that resulted in dropping several empirically redundant but conceptually important variables such as corruption, gender inequality and environmental performance, and 5) data correction methods for missing data, such as imputation.

In developing a theoretically based model of vulnerability to modern slavery, there are several common challenges that must be overcome. Global models of vulnerability will face data limitations in terms of available data covering a majority of our 167 countries for prevalence and vulnerability. All variables included in the Vulnerability Model must cover most of our 167 countries, be published regularly, and explain clearly how these measures were developed. Then there is the conceptual exercise of ensuring that these measured variables match the phenomena we seek to capture in our model.

This exercise in ensuring concept-variable consistency is often limited by data availability but requires the intentional selection of variables that represent the potential risks that individuals vulnerable to modern slavery may face across a broad array of potential factors consistent with the areas of insecurity reflected by human security theory.

Lags in administrative data also affect our Vulnerability Model, as even the most recent information may still not reflect current situations on the ground at this moment. Finally, as a result of standard statistical methods to refine our model, we perform collinearity checks on our variables to ensure that we do not retain redundant variables. However, as a result of this process, we were required to drop empirically redundant but conceptually important measures such as Corruption, Gender Inequality, and Environmental Performance. We must also note that we have employed imputation to resolve missing data issues for Dimensions 1 and 2 for above 51 percent missing data and for Dimensions 3, 4, and 5 for above 50 percent missing data by using regional averages. Where these missing data thresholds were met, we replaced missing data points with subregional averages for the affected variable. These efforts ensured that missing data points were supplemented with regionally specific trends and information on affected vulnerability variables.

Portrait of Moctar, 19. Nouakchott, Mauritania. Since his birth, Moctar have been a slave in a Moorish family with his mother and brother. In 2012, after several attempts, he managed to escape and met an activist from the antislavery movement. His family refused to leave with him. His mother was even against his release and gave witness against him." When I was younger, my mother told me every night that we must respect our masters, because their caste is higher than ours, and that they are saints," says Moctar. He has very bad memories of this experience because of the bad treatment he was a victim of; the scars are not only in his mind but also in his body. One year after his release, he entered school at the age of 13. He now wishes to become a lawyer to fight for the cause of the Haratins.

Photo credit: Seif Kousmate



### **APPENDIX 2:**

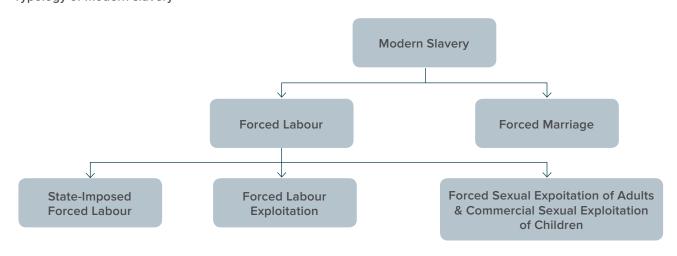
#### Part B: Global Slavery Index Prevalence Estimation

While measuring the number of people in modern slavery remains a challenge, substantial improvements have been made in this field in recent years. In 2017, the inaugural Global Estimates of Modern Slavery were produced by the International Labour Organization (ILO) and the Walk Free Foundation (WFF) in partnership with the International Organization for Migration (IOM). The regional estimates produced through this collaboration form the starting point for the estimation of national level estimates presented here.

#### Global Estimates of Modern Slavery

The Global Estimates were comprised of two sub-estimates: an estimate of forced labour and an estimate of forced marriage. The sub-estimate of forced labour was then further broken down into three categories: forced labour in the private economy, forced sexual exploitation, and state-imposed forced labour.

FIGURE 1
Typology of modern slavery



Sugarcane cutters transported in a cattle truck from their lodgings to the field in the morning. In Bahia State, Northeastern Brazil there are still cases of sugarcane workers subjected to debt bondage and modern slavery.

> Photo credit: Ricardo Funari/Brazil Photos/ LightRocket via Getty Images

As no single source provides data that are suitable for the measurement of all forms of modern slavery, a combined methodological approach was adopted for the Global Estimates of Modern Slavery, drawing on three sources of data to calculate the sub-estimates:

- 1/ The central element of the methodology is the use of 54 specially designed, national probabilistic surveys involving interviews with more than 71,000 respondents across 48 countries. The estimates of forced labour in the private economy (excluding the sex industry) and forced marriage were derived from these surveys. Only cases of modern slavery that occurred between 2012 and 2016 were included in these estimates, and all situations of forced labour were counted in the country where the exploitation took place. In the five-year reference period for the estimates, while surveys were conducted in 48 countries, men, women, and children were reported to have been exploited in 79 countries.<sup>46</sup>
- 2/ Administrative data from IOM's databases of assisted victims of trafficking were used in combination with the 54 datasets to estimate forced sexual exploitation and forced labour of children, as well as the duration of forced labour exploitation. This involved calculating the ratio of adults to children, and also of "sexual exploitation" cases to "labour" cases in the IOM dataset, which contained information on 30,000 victims of trafficking around the world who had received assistance from the agency. These ratios were then applied to the estimates taken from the survey data

- on forced labour of adults to arrive at an estimate of the number of children in forced labour and another estimate of "sexual exploitation."
- 3/ As the surveys focused on the non-institutionalised population, meaning that people in prisons, labour camps or military facilities, and other institutional settings are not sampled, the surveys are not suitable for estimating state-imposed forced labour. Instead, the estimate of state-imposed forced labour was derived from validated secondary sources and a systematic review of comments from the ILO Committee of Experts on the Application of Conventions and Recommendations relating to stateimposed forced labour.

Each sub-estimate was initially calculated as a flow estimate; that is, the total number of persons who were victims of modern slavery during a specified period of time between 2012 and 2016. The flow estimate was then converted into a stock estimate; that is, the average number of persons in modern slavery at a given point in time during the 2012 to 2016 reference period. The stock estimate is calculated by multiplying the total flow by the average duration (the amount of time in which people were trapped in forced labour) of a spell of modern slavery. The average duration of modern slavery was determined from the database of the IOM, containing records of assisted victims of trafficking who were registered during or after 2012.

A detailed explanation of the methodology underpinning the Global Estimates of Modern Slavery is available online.<sup>47</sup>



#### MEASURING THE PREVALENCE OF MODERN SLAVERY THROUGH SURVEYS

In 2014, the Walk Free Foundation began using surveys as the core element of the methodology to estimate the prevalence of modern slavery. This began with a trial in a small number of countries via the Gallup World Poll<sup>48</sup> and has since expanded to cover 48 countries<sup>49</sup> (see Figure 2 for a regional breakdown of the number of countries surveyed). These surveys form the central component of the Global Estimates of Modern Slavery.

FIGURE 2
Countries of exploitation identified from the 48 countries surveyed



Due to the limited time available for each interview, the questions asked were direct and designed to identify cases that fall into two broad categories: unfree labour and forced marriage. Initially developed in 2014, the questions were tested in a small number of countries and the results were positive; respondents generally understood the questions, recalled the information being sought, wanted to provide the information, and could respond in the format required. Since then, a few refinements have been made, such as in 2015 to ask respondents to explain the experience in their own words, and in 2016 to get a more accurate assessment of the number of children who may be forced to work.

Surveys were conducted only in countries where the World Poll survey is delivered through face to face interviews, as the sensitive nature of the questions means that interviewers need to read non-verbal cues, to observe where clarification may be needed, and to build rapport with respondents. Respondents were initially asked "Have you or has anyone in your immediate family...

- » Ever been forced to work by an employer or a recruiter?
- » Ever been forced to work to repay a debt with an employer or recruiter and were not allowed to leave?
- » Ever been offered one kind of work, but then were forced to do something else and not allowed to leave?

- » Including children, ever had to work in order to help another family member who was forced to work by an employer?
- » Including children, ever been forced to work for an employer so that another person would receive a job, land, money or other resources?
- » Ever been forced to marry?"

When a respondent answered "yes" to any of these questions, they were then asked a series of questions to learn more about the experience, including when and where it occurred, the modes of coercion applied to keep victims from leaving that work, the type of work the victims were forced to do, and, in the case of forced marriage, whether they consented to the marriage.

Since 2014, more than 71,000 people have been interviewed through a total of 54 surveys conducted in 48 countries. The countries surveyed to date represent over half of the world's population and form the most extensive survey program on modern slavery ever undertaken. Cases of modern slavery have been identified in every country surveyed, which is extraordinary given that the sampling does not target hot spots or vulnerable populations. <sup>50</sup> Although the methodology continues to be refined, early indications are that this approach holds great promise for measuring what had been thought to be unmeasurable. Further information about the modern slavery surveys is available online. <sup>51</sup>

## From global and regional to national estimates

The national estimates presented in this Global Slavery Index were calculated<sup>52</sup> using individual and country-level risk factors of modern slavery. The final set of risk factors were selected from an exhaustive list of variables to optimally predict confirmed cases of forced labour and forced marriage. The model was then used to generate average predicted probabilities of modern slavery by country. The regional totals in the Global Estimates of Modern Slavery were then apportioned based on each country's average predicted probability of modern slavery. This process involved the following key steps:

- 1/ Identifying risk factors of modern slavery. Using national surveys that included questions on experiences of forced labour and forced marriage to identify which variables were statistically associated with respondents in the survey who had been victimised, versus those who had not been victimised. This included using a series of statistical tests to identify relationships between instances of victimisation and other variables collected through the survey process (such as age, gender, marital status, education, urban/rural, employment, life evaluation, business ownership, and ability to live on current income). Country-level predictors of risk from the most recent Global Slavery Index Vulnerability Model were also included.
- 2/ Predicting modern slavery. These risk factors were used to build a statistical model that best predicts occurrence of modern slavery at the individual level.
- 3/ Estimating prevalence and aligning with Global Estimates of Modern Slavery regional estimates. Individual predictions were aggregated into risk scores at the country level. Whereas survey data on forced labour and forced marriage are not available for every country, a broader set of survey data covering variables such as age, gender, marital status and so on was available for 147 countries. Country risk scores were used to estimate country prevalence, based on the extent to which the country risk score deviated from the average regional risk scores. For example, if a country had the exact same risk score as the relevant region in the Global Estimates, then it was assumed that the prevalence in the country was the same as in the region.
- 4 / Final calculation of estimated prevalence. Number of victims was then estimated by applying the estimated prevalence to population data for each country. To this "base" estimate, an estimate of state-imposed forced labour was added to determine the final estimated prevalence of all forms of modern slavery.

The process followed in each of these steps is detailed below:

## 1/ Identifying risk factors of modern slavery

#### Data and variables

First, individual and country-level variables that have a significant relationship with forced labour or forced marriage at the individual level were identified. Data for this analysis were taken from Gallup World Poll (GWP) surveys conducted in 2014, 2015, and 2016,<sup>54</sup> including a set of surveys with a module on modern slavery used to estimate the risk model, and a broader set of surveys used for prediction purposes, as well as country-level risk variables from the Global Slavery Index Vulnerability Model.

#### Estimation data and outcome variables

Estimation data were drawn from 54 surveys conducted in 48 countries which included a module on Modern Slavery, with a total sample of 71,158 individual interviews. This included:

- » Fifty-three national surveys conducted through the GWP in 48 countries between 2014 and 2016, with a total sample of 57,158 individual interviews.
- » A 2016 survey covering 15 Indian states: Andhra Pradesh, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Telangana, Uttar Pradesh, and West Bengal, with a total sample of 14,000 individual interviews.

Cases of forced labour and forced marriage were identified with a series of screening and follow up questions as described earlier. On the basis of these questions, victims of forced labour were identified according to the following criteria:

- » The work was involuntary ("Yes" to any of the screening questions), AND
- » The work was under coercion or the menace of a penalty, AND
- » The work occurred in the last five years.

Victims of forced marriage were identified according to the following criteria:  $^{55}\,$ 

- » The marriage was involuntary ("yes" to the screening question), AND
- » The marriage had occurred without their consent (forced marriage).

#### Prediction data and predictor variables

A broader set of data ("Prediction data") was drawn from 433 GWP national surveys conducted in 155 countries between 2014 and 2016, with a total sample of 451,161 individual interviews. A total of 157 variables that could potentially be used to predict forced labour or forced marriage status were identified using the five dimensions of the Walk Free Foundation Vulnerability Model as an organising framework. These included:

- » One hundred twenty-two individual-level variables from the GWP core questionnaire, which collects information on basic demographic variables such as the respondent's age, gender, educational attainment, marital status, employment status, urban/rural location, and number of adults (15 and older) and children (under 15) in the household, as well as development-oriented topic areas including law and order, food and shelter, health, government and politics, business and economics, citizen engagement, education and families, environment and energy, social issues, religion and ethics, work, and wellbeing.
- » Thirty-five country-level variables from the Walk Free Foundation Vulnerability Model.<sup>56</sup>

Not all GWP variables were fielded in each survey country<sup>57</sup> during each of the three data periods (2014, 2015, 2016), which lead to varying levels of geographic coverage. A list of 19 independent variables with low levels of missing data was identified to maximize geographic coverage of a "base" driver model. In addition to the "base" model, four additional models were created with an increasing number of predictor variables, and corresponding decrease in geographic coverage.

## 2/ Predicting modern slavery

## Individual-level models

Several steps were undertaken, using the data noted above to identify a best-fitting prediction model. Forced labour and forced marriage were modelled separately as the two distinct forms of slavery are expected to be predicted by different subsets of variables. The probability of a given respondent<sup>58</sup> reporting a case of modern slavery was estimated for each outcome (forced labour and forced marriage) separately, using a logit model<sup>59</sup> of the form:

#### **Equation 1**

$$\ln\left(\frac{p}{1-p}\right)_i = \beta_0 + \beta_1 x + \beta_2 y_i + \varepsilon_i$$

Where the logit of the probability p of FL/FM for each individual i is a function of a constant term  $\beta_0$  (intercept), a vector of individual-level demographic control variables x with values varying for each individual i, and with unknown coefficients  $\beta_1$ , a vector of individual-level predictor variables y, with values varying for each individual i, and with unknown coefficients  $\beta_2$ , and an individual error term  $\varepsilon_i$ .

Of the 157 variables available, a subset of variables was selected based on statistical and theoretical criteria in order to enhance the predictive power of the model, while maintaining explanatory relevance. Variables were excluded on the basis of having no significant association with either forced labour or forced marriage:

- » no multivariate significant association with either forced labour or forced marriage when entered within their respective geographic block, and
- » a high degree of multicollinearity, as expressed by variance inflation factors of 3 and above.

Finally, when variables are collinear or multivariate insignificant, priority was given to variables with greater theoretical relevance. For example, "confidence in judicial system," which relates to issues of regulatory quality that have a direct bearing on modern slavery, is preferred over "confidence in financial system," which may only have an indirect relationship with modern slavery.

Variables were entered into six models (numbered 1-6 in Table 1) to allow for the inclusion of a successively more exhaustive set of predictors. These models are nested hierarchically, with each successive model including all variables in the prior models, running from the simplest model that includes only seven demographic factors, to an "extended plus" model including 33 predictors of forced labour and 29 predictors of forced marriage (see Table 1 for final list of variables).

TABLE 1
Predictor Variables in Final Models

Model	Predictors of forced labour	Predictors of forced marriage
1. Demographic	Age Urbanicity Gender Educational Attainment Marital Status Employment Status	Age Urbanicity Gender Educational Attainment Marital Status Employment Status
2. Base	Not Enough Money: Food Life Today (0-10) Currently Own a Business Feelings about HH income Health Problems	Not Enough Money: Food
3. Indices	Negative Experiences Youth Development Community Attachment Civic Engagement Law & Order	Negative Experiences Youth Development
4. Medium	Corruption in Government Confidence in Judicial System Confidence in National Government Financial Inclusion (country)	Safe Walking Alone Regulatory Quality (country) Disabled Rights (country) Coming Up with Money (country) Minorities (country) International Conflict (country)
5. Extended	City Economy Getting Better Move Permanently to Another Country Economic Conditions Born in Country Treated with Respect Smile or Laugh Experienced Anger Yesterday Public Transportation Systems Quality of Water	City Economy Getting Better Move Permanently to Another Country National Economy Getting Better Standard of Living Better Experienced Enjoyment Yesterday Move Away or Stay City: Quality Healthcare
6. Extended Plus	Sent Financial Help	Sent Financial Help Approval of EU Leadership Approval of US Leadership

The models were estimated using survey data from the 48 countries where the modern slavery module was included. In order to estimate risk of modern slavery in countries available in the GWP without a modern slavery module, the probability of a positive outcome for each individual in the prediction dataset is calculated and then aggregated into a weighted average predicted probability at the country level. Table 2 shows the sample sizes and number of countries included in each of the estimation and prediction models.

The demographic factors-only models showed relatively poor performance, so they were not used for prediction purposes. The "base" models, including a relatively small number of variables, have the widest geographic coverage (152 countries). The "extended plus" models, with the largest set of predictors, have the narrowest geographic coverage (116 countries for forced labour and 110 countries for forced marriage).

TABLE 2
Sample sizes and number of countries for each estimation and prediction model<sup>60</sup>

	Forced labour		Forced marriage			
Model	Estimation Sample	Prediction Sample	Prediction Countries	Estimation Sample	Prediction Sample	Prediction Countries
1. Demographics	68,628	N/A	N/A	68,516	N/A	N/A
2. Base	65,837	388,146	152	67,518	434,905	152
3. Indices	50,946	351,499	141	53,518	374,512	147
4. Medium	47,967	315,512	121	48,457	306,176	112
5. Extended	47,966	309,544	120	48,457	289,306	111
6. Extended Plus	23,148	279,171	116	48,457	286,347	110

The predictive performance of each model was evaluated using a broad set of post-estimation goodness-of-fit metrics, <sup>61</sup> which were calculated on the same set of respondents (i.e. that had data available for all variables) to ensure comparability. Results indicated good predictive power (AUC values greater than .70) for all models. The base model is used as it is most useful for estimation, but the other models, with a greater complexity in terms of predictors but similar predictive performance, are useful to validate the robustness of the base model, which maximises geographic coverage (see Table 1).

#### Multi-level models

After identifying the "base" model as the best for prediction and maximising geographic coverage, multilevel models (MLM) were fitted to the data in order to enhance the predictions of the individual-level models and take into account the hierarchical nature of these data. MLMs allow for the extrapolation of model results beyond the sample of 48 countries.

All multilevel models were estimated using Bayesian<sup>62</sup> applied regression modelling.<sup>63</sup> The individual-level base model was fitted before being expanded sequentially. First by allowing intercepts to vary across countries according to a random effect:

#### **Equation 2**

$$\ln\left(\frac{p}{1-p}\right)_{ij} = \beta_0 + \beta_1 x_{ij} + \beta_2 y + u_j + \varepsilon_{ij}$$

Equation (2) is the same as the individual-level regression equation (1), with the addition of a subscript j to classify individuals in countries, and an additional coefficient  $u_j$  and its associated distribution, representing a random coefficient that is allowed to vary by country.

Next, by modelling country-level variation in order to improve our predictions for countries where there was no modern slavery survey with country-level predictor  $\beta_3 V_j$  representing the vulnerability score V, with values varying for each country j, and with an unknown coefficient  $\beta_3$ :

#### **Equation 3**

$$\ln\left(\frac{p}{1-p}\right)_{ij} = \beta_0 + \beta_1 x_{ij} + \beta_2 y_{ij} + \beta_3 v_j + u_j + \varepsilon_{ij}$$

The Vulnerability Model is ideal for this purpose, as it incorporates a robust set of external datasets aggregated to explain or predict the prevalence of modern slavery. An examination of the association between country-level prevalence estimates and vulnerability scores confirmed a moderate correlation (Pearson r =.33).

The individual-level models showed that owning a business significantly increases the risk of being a victim of forced labour. Members of the Walk Free Foundation's Expert Working Group indicated that this result was surprising, as business ownership was expected to be a protective factor and hypothesized that the result could be driven by "necessity entrepreneurs": individuals who are forced into starting a small-scale business because of a lack of other income-generating opportunities. <sup>64</sup> A preliminary set of regional regression analyses confirmed that business ownership was only a significant predictor of forced labour in South Asia and Sub-Saharan Africa, where not owning a business has a protective effect. Finally a cross-level interaction effect for "business ownership" was introduced:

#### **Equation 4**

$$\ln\left(\frac{p}{1-p}\right)_{ij} = \beta_0 + \beta_1 x_{ij} + \beta_2 y_{ij} + \beta_3 v_j + \beta_4 e_{ij} * r + u_j + \varepsilon_{ij}$$

With  $\beta_4 e_{ij} * r$  representing the interaction between business-ownership dummy  $e_{ij}$ , with a coefficient  $\beta_4$  that varies for the two levels of regional dummy variable r.

## Model Performance

An examination of model performance<sup>65</sup> shows that all MLMs perform similarly. In the case of the forced labour models, all MLMs perform similarly, and better than the fixed-effects model. In the case of the forced marriage models, differences were negligible.

Actual vs. fitted prevalence plots for the 48 countries with modern slavery survey data showed a very close fit, without any clear outliers. The introduction of country fixed (and then random) effects represented a major improvement above and beyond the individual-level models, which relied on regional fixed-effects. While the simplicity of the country fixed-effects model is attractive, this approach would not achieve our goal of estimating slavery in countries that are not included in the sample.

In order to exemplify the benefit of the more complex MLMs, country intercepts were removed from the predictions to simulate new data including countries not previously surveyed. The random intercepts model showed a poorer fit with the actual values than the other two models (a perfect fit is exemplified by the red dotted line). A random intercepts model with country level predictors and (in the case of forced labour) a cross-level interaction provides the most comprehensive framework to undertake these inferences and was the model on which estimates were based.

A fuller description of the process by which the final model was achieved is set out in a forthcoming publication.<sup>66</sup>

# 3/ Estimating prevalence and aligning with regional estimates from The Global Estimates

As summarised above, several concomitant risk factors for modern slavery, including demographic factors, such as age, gender, and employment status – but also a variety of socio-economic and psychographic risk factors, such as feelings about household income, life evaluation scores, and negative experienced affect – were identified in the analysis. Based on these risk factors, as well as country-level vulnerability scores, a hierarchical Bayes modelling approach was used to accurately predict the forced labour and forced marriage status of individuals and the average prevalence of modern slavery at the country level.

Average weighted predicted probabilities were then calculated for forced labour and forced marriage using this best-fitting predictive model.<sup>67</sup> The process to arrive at estimated prevalence of modern slavery was undertaken in several steps, as follows:

- 1/ Disaggregate regional-level estimates of modern slavery from The Global Estimates into 12 homogeneous subregions (11 broad ILO sub-regions, plus split Southeast Asia and Pacific).
- 2 / Calculate subregional level prevalence of modern slavery for each subregion (for example, South Asia = 0.77%).
- 3 / Impute risk factors for 20 countries that are missing GWP data, as an average over several multiple imputation approaches (hot deck, amelia, glm, random forests).
- 4/ Adjust country risk by country of exploitation. The basic premise is to take a region such as "Receiving-Southeast Asia," with Singapore, Malaysia, and Thailand, and apply an adjustment factor equal to the ratio of victims identified in the national surveys in Singapore, Malaysia, and Thailand to total exploited victims in the region. If no national surveys were conducted in a given region, we estimate that the prevalence is equal to modelled risk multiplied by population. This is calculated using the following steps:
  - a. Calculate number of victims identified by the country surveys who are exploited in a different country.
  - b. Code countries as either "net sending" or "net receiving" (see Table 3). This was done on the basis of available information from Global Slavery Index 2016, UNODC Global Report on TIP 2016, US TIP 2017, GRETA, and ILO Global Estimates of Migrant Workers.<sup>68</sup> Sending versus receiving status was coded by two independent coders. If there was agreement, the common code was maintained. However, if conflicting codes were allocated, the decisions were jointly reviewed and often resolved. In the event that no agreement was reached, a third party would be consulted.
  - c. Calculate aggregate number of victims by place of exploitation in sending and receiving areas.
  - d. Adjust down the risk score of sending regions that have a lower number of victims being exploited in country.
  - e. Adjust up the risk score of receiving regions that have a higher number of victims being exploited in country. For example, the risk in "receiving" Southeast Asia (Singapore, Thailand, Malaysia) is adjusted up by a factor of 1.58, while "sending" Southeast Asia is adjusted down by a factor of 0.94.

- 5 / Taking adjusted country risks, estimate prevalence in a country based on the regional prevalence and the distance between the adjusted country risk and the weighted average regional risk score, following these steps:
  - a. Normalise the adjusted and imputed country risk scores to a 1-100 range, with 1=min risk, 100= max risk.
  - Multiply the normalised risk score by the country population.
  - c. Calculate regional prevalence by dividing aggregates for total modern slavery (excluding state-imposed forced labour) over total population.
  - d. Calculate average normalised regional score by dividing the sum of normalised risk scores by the country population.
  - e. Calculate country prevalence by multiplying the regional average by the ratio of normalised country risk score over the average normalised regional score.

To simplify, since normalised modern slavery risk in Afghanistan (39.1) is 2.89 times higher than the average risk in the South Asia region (13.6), we estimate that prevalence in Afghanistan is 2.89 times greater than the regional average, or about 2.2 percent.

Only one exception is made, for Mauritania, where the survey estimate (2.1 percent) is used rather than the modelled risk score due to the distinct nature of slavery in the country. The practice is entrenched in Mauritanian society with slave status being inherited and deeply rooted in social castes and the wider social system. Those owned by masters often have no freedom to own land and cannot claim dowries from their marriages nor inherit property or possessions from their families. Given the evidence available that supports the higher survey estimate, that estimate is taken from Mauritania, and other countries in Sub-Saharan Africa are adjusted down to ensure totals are aligned with the Global Estimates of Modern Slavery.

People march towards the sea holding banners and candles in April, 2015 in Sliema, in the outskirts of Valletta, Malta. The vigil was held in memory of over 650 migrants who had lost their lives at sea in what is being described as the worst tragedy in the Mediterranean so far. The shipwreck took place last Saturday when a vessel holding some 700 migrants was shipwrecked off the coast of Libya leaving only 28 survivors. So far only 24 corpses have been collected, and the Italian authorities are holding two of the survivors (the captain and a crew member) on suspicion of human trafficking.

Photo credit: Raymond Attard / Barcroft Media via Getty Images



TABLE 3
Classification of countries as "net sending" vs "net receiving"

Albania Sending Albania Sending Algeria Receiving Angola Receiving Argentina Receiving Armenia Sending Australia Receiving Australia Receiving Azerbaijan Sending Bahrain Receiving Bangladesh Sending Belarus Sending Belarus Sending Benin Sending Bolivia, Plurinational State of Sending Brazil Receiving Brazil Receiving Brunel Darussalam Receiving Burundi Sending Burundi Sending Cameroon Sending Cameroon Sending China Receiving China Receiving Congo Sending Congo Sending Corpota Sending Corpota Sending Corpota Sending Corpota Sending Congo Sending Congo Sending Corpota Sending Corpota Sending Corpota Sending Congo Sending Congo Sending Congo Sending Congo Sending Corpota Sending Corpota Sending Congo Sending Copota Sending Copot	Country	Net sending/net receiving
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Botswana Receiving Brazil Receiving Brunei Darussalam Receiving Bulgaria Sending Burkina Faso Sending Burundi Sending Cambodia Sending Cameroon Sending Cape Verde Sending Cantral African Republic Sending Chide Receiving Colombia Sending Congo Sending Congo, Democratic Republic Sending Cote d'Ivoire Sending Cuba Sending Cuba Sending Chad Receiving Cotech Republic Receiving Cote d'Ivoire Sending Cote Sending Cote Sending Cote d'Ivoire Sending Cuba Sending Copprus Receiving Cozech Republic Receiving Cozech Republic Receiving	Bolivia, Plurinational State of	Sending
Brazil Receiving Brunei Darussalam Receiving Bulgaria Sending Burkina Faso Sending Burundi Sending Cambodia Sending Cameroon Sending Canada Receiving Cape Verde Sending Chad Sending Chad Sending Chile Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Chad Receiving Cote d'Ivoire Sending Cuba Sending Cuba Sending Cuba Receiving China Receiving Coroatia Receiving Coroatia Receiving Coroatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving	Bosnia and Herzegovina	Sending
Brunei Darussalam Bulgaria Sending Burkina Faso Sending Burundi Sending Cambodia Sending Cameroon Sending Canada Receiving Cape Verde Sending Central African Republic Chide Receiving China Colombia Sending Congo Congo, Democratic Republic of the Costa Rica Receiving Croatia Receiving Cuba Sending Cuprus Receiving Cyprus Receiving Czech Republic Receiving Receiving	Botswana	Receiving
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Burkina Faso Sending Burundi Sending Cambodia Sending Cameroon Sending Canada Receiving Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving Colombia Sending Congo Sending Congo, Democratic Republic Sending Costa Rica Receiving Croatia Receiving Cuba Sending Cuba Sending Cyprus Czech Republic Receiving Receiving Czech Republic Receiving Receiving	Brunei Darussalam	Receiving
Burundi Sending Cambodia Sending Cameroon Sending Canada Receiving Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Cote d'Ivoire Sending Cuba Sending Cyprus Receiving Czech Republic Receiving Czech Republic Receiving Czech Republic Receiving Czech Republic Receiving	Bulgaria	Sending
Cambodia Sending Cameroon Sending Canada Receiving Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Cuba Sending Cyprus Receiving Czech Republic Receiving Czech Republic Receiving Czech Republic Receiving	Burkina Faso	Sending
Cameroon Sending Canada Receiving Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Cote d'Ivoire Sending Cuba Sending Cyprus Receiving Czech Republic Receiving Czech Republic Receiving Receiving Czech Republic Receiving	Burundi	Sending
Canada Receiving Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Cuba Sending Cyprus Receiving Czech Republic Receiving Czech Republic Receiving Receiving	Cambodia	Sending
Cape Verde Sending Central African Republic Sending Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Cuba Sending Cyprus Receiving Czech Republic Receiving Czech Republic Receiving Receiving	Cameroon	Sending
Central African Republic Chad Sending Chile Receiving China Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving	Canada	Receiving
Chad Sending Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving	Cape Verde	Sending
Chile Receiving China Receiving Colombia Sending Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving	Central African Republic	Sending
China Receiving  Colombia Sending  Congo Sending  Congo, Democratic Republic of the  Costa Rica Receiving  Côte d'Ivoire Sending  Croatia Receiving  Cuba Sending  Cyprus Receiving  Czech Republic Receiving  Denmark Receiving	Chad	Sending
Colombia Sending  Congo Sending  Congo, Democratic Republic of the  Costa Rica Receiving  Côte d'Ivoire Sending  Croatia Receiving  Cuba Sending  Cyprus Receiving  Czech Republic Receiving  Denmark Receiving	Chile	Receiving
Congo Sending Congo, Democratic Republic of the Costa Rica Receiving Côte d'Ivoire Sending Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving	China	Receiving
Congo, Democratic Republic of the  Costa Rica Receiving  Côte d'Ivoire Sending  Croatia Receiving  Cuba Sending  Cyprus Receiving  Czech Republic Receiving  Denmark Receiving	Colombia	Sending
of the  Costa Rica Receiving  Côte d'Ivoire Sending  Croatia Receiving  Cuba Sending  Cyprus Receiving  Czech Republic Receiving  Denmark Receiving	Congo	Sending
Côte d'Ivoire Sending Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving		Sending
Croatia Receiving Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving	Costa Rica	Receiving
Cuba Sending Cyprus Receiving Czech Republic Receiving Denmark Receiving	Côte d'Ivoire	Sending
Cyprus Receiving Czech Republic Receiving Denmark Receiving	Croatia	Receiving
Czech Republic Receiving  Denmark Receiving	Cuba	Sending
Denmark Receiving	Cyprus	Receiving
	Czech Republic	Receiving
Djibouti Sending	Denmark	Receiving
	Djibouti	Sending

Country	Net sending/net receiving
Dominican Republic	Receiving
Ecuador	Receiving
Egypt	Receiving
El Salvador	Sending
Equatorial Guinea	Sending
Eritrea	Sending
Estonia	Sending
Ethiopia	Sending
Finland	Receiving
France	Receiving
Gabon	Receiving
Gambia	Sending
Georgia	Receiving
Germany	Receiving
Ghana	Sending
Greece	Receiving
Guatemala	Sending
Guinea	Sending
Guinea-Bissau	Sending
Guyana	Receiving
Haiti	Sending
Honduras	Sending
Hong Kong	Receiving
Hungary	Sending
Iceland	Receiving
India	Sending
Indonesia	Sending
Iran, Islamic Republic of	Receiving
Iraq	Sending
Ireland	Receiving
Israel	Receiving
Italy	Receiving
Jamaica	Sending
Japan	Receiving
Jordan	Receiving
Kazakhstan	Receiving
Kenya	Receiving
Korea, Democratic People's Republic of (North Korea)	Sending
Korea, Republic of (South Korea)	Receiving
Kosovo	Sending
Kuwait	Receiving

Table 3 continued.

O	Not an allow for the control of
Country	Net sending/net receiving
Kyrgyzstan	Sending
Lao People's Democratic Republic	Sending
Latvia	Sending
Lebanon	Receiving
Lesotho	Sending
Liberia	Sending
Libya	Receiving
Lithuania	Receiving
Luxembourg	Receiving
Macedonia, the former Yugoslav Republic of	Receiving
Madagascar	Sending
Malawi	Sending
Malaysia	Receiving
Mali	Sending
Mauritania	Sending
Mauritius	Sending
Mexico	Sending
Moldova, Republic of	Sending
Mongolia	Sending
Montenegro	Receiving
Morocco	Sending
Mozambique	Sending
Myanmar	Sending
Namibia	Receiving
Nepal	Sending
Netherlands	Receiving
New Zealand	Receiving
Nicaragua	Sending
Niger	Sending
Nigeria	Sending
Norway	Receiving
Oman	Receiving
Pakistan	Receiving
Panama	Receiving
Papua New Guinea	Sending
Paraguay	Sending
Peru	Receiving
Philippines	Sending
Poland	Sending
Portugal	Receiving
Qatar	Receiving
Romania	Sending

	Table 3 continuea.
Country	Net sending/net receiving
Russia	Receiving
Rwanda	Sending
Saudi Arabia	Receiving
Senegal	Sending
Serbia	Sending
Sierra Leone	Sending
Singapore	Receiving
Slovakia	Sending
Slovenia	Receiving
Somalia	Sending
South Africa	Receiving
South Sudan	Sending
Spain	Receiving
Sri Lanka	Sending
Sudan	Sending
Suriname	Receiving
Swaziland	Sending
Sweden	Receiving
Switzerland	Receiving
Syrian Arab Republic	Sending
Taiwan	Receiving
Tajikistan	Sending
Tanzania, United Republic of	Sending
Thailand	Receiving
Timor-Leste	Sending
Togo	Sending
Trinidad and Tobago	Receiving
Tunisia	Receiving
Turkey	Receiving
Turkmenistan	Sending
Uganda	Sending
Ukraine	Sending
United Arab Emirates	Receiving
United Kingdom	Receiving
United States	Receiving
Uruguay	Sending
Uzbekistan	Sending
Venezuela, Bolivarian Republic of	Receiving
Vietnam	Sending
Yemen	Sending
Zambia	Sending
Zimbabwe	Sending

- 6/ A final calculation was performed to incorporate existing estimates derived from multiple systems estimation (MSE) in the Europe and Central Asia region. The predictive models are built on information from countries where the World Poll, including the modern slavery module, was conducted face-to-face (F2F). Countries where the World Poll is only implemented using computer-assisted telephone interviewing (CATI) have zero chance of selection for a modern slavery survey, meaning that, at present, we are not able to test how the risk factors will behave in CATI countries. Despite this, there is also no evidence to suggest that the risk factors will not act in the same way, for example, being female is very likely to remain a risk factor for forced marriage and poverty a risk factor for forced labour.
  - Further, MSE has emerged as a suitable methodology for estimation in countries where surveys are not used and the methodology has been endorsed by several governments and international organisations. Several considerations precluded the use of MSE-estimates alone, notably, (i) the methodology is at an early stage of use in the modern slavery space with several refinements underway, and (ii) some forms of modern slavery, for example, forced marriage are at present unlikely to be captured in administrative records meaning that MSE alone would lead to an underestimate.

While survey-based estimates are subject to a high level of uncertainty due to sampling and non-sampling errors, the two available MSE estimates employed different approaches and therefore show large variability across countries with similar risk profiles. In light of the considerations set out above, the average of the model-derived prevalence estimates and MSE-based prevalence estimates for the United Kingdom<sup>70</sup> and The Netherlands<sup>71</sup> were set as anchor points within the region. This was applied as follows:

- a. Countries within the Europe and Central Asia subregions were divided into 'MSE' and 'non-MSE' sub-regions. In practice this aligns with CATI vs. F2F countries in the Gallup World Poll. For example, both Spain and Greece are in "Southern Europe", but Spain is CATI, and hence its estimate is based on extrapolation from MSE, while Greece is F2F, and hence its estimate is based on non-MSE extrapolation (more below on each type).
- b. Set anchor points and extrapolate to other MSE countries: (i) Average prevalence estimate for the UK was set as the anchor point for Northern Europe (MSE sub-region, i.e. excluding Baltic states) and (ii) the average prevalence estimate for the Netherlands was set as the anchor point for Western Europe (all countries) and Southern Europe (MSE sub-region).
- c. The corresponding anchor point was then extrapolated to other countries in the region based on ratio of risk in the anchor to risk in the extrapolation country. For example, if average prevalence in the UK is 0.20% and modelled risk is 0.775, we estimate that prevalence in Sweden is given by the ratio of its risk to the UK's risk, multiplied by the UK prevalence, or (0.645/0.775)\*0.20%= 0.17%.
- d. Adjust the prevalence of non-MSE countries in Europe and Central Asia to ensure the total aligns with the Global Estimate. The number of victims from the Global Estimates who are unaccounted for in Europe and Central Asia following the MSE adjustment were calculated, then prevalence in non-MSE countries was calculated proportional to the risk of each country relative to the non-MSE population adjusted regional average risk.

# 4/ Final calculation of estimated prevalence, including state-imposed forced labour

The process outlined in steps 1 to 3 produces prevalence estimates for all forms of modern slavery except state-imposed forced labour. Given the nationally-specific

manifestations of state-imposed forced labour where it does occur, it was excluded from the steps outlined above. The final step involves aggregating the estimate resulting from the process set out above, with the estimates of state-imposed forced labour. A final estimate of the prevalence of all forms of modern slavery is then calculated. The resulting estimates are presented in Table 4.

TABLE 4
Estimated prevalence of modern slavery by country

Rank	Country	Estimated prevalence (per 1,000 population)	Estimated absolute number of victims	Population
1	Korea, Democratic People's Republic of (North Korea)**	104.6	2,640,000	25,244,000
2	Eritrea	93.0	451,000	4,847,000
3	Burundi	40.0	408,000	10,199,000
4	Central African Republic	22.3	101,000	4,546,000
5	Afghanistan	22.2	749,000	33,736,000
6	Mauritania	21.4	90,000	4,182,000
7	South Sudan	20.5	243,000	11,882,000
8	Pakistan	16.8	3,186,000	189,381,000
9	Cambodia	16.8	261,000	15,518,000
10	Iran, Islamic Republic of	16.2	1,289,000	79,360,000
11	Somalia	15.5	216,000	13,908,000
12	Congo, Democratic Republic of the	13.7	1,045,000	76,197,000
13	Mongolia	12.3	37,000	2,977,000
14	Sudan	12.0	465,000	38,648,000
15	Chad	12.0	168,000	14,009,000
16	Rwanda	11.6	134,000	11,630,000
17	Turkmenistan**	11.2	62,000	5,565,000
18	Myanmar	11.0	575,000	52,404,000
19	Brunei Darussalam	10.9	5,000	418,000
20	Belarus	10.9	103,000	9,486,000
21	Papua New Guinea	10.3	81,000	7,920,000
22	Lao People's Democratic Republic	9.4	62,000	6,664,000
23	Thailand	8.9	610,000	68,658,000
24	Swaziland	8.8	12,000	1,319,000
25	Macedonia, the former Yugoslav Republic of	8.7	18,000	2,079,000
26	Congo	8.0	40,000	4,996,000
27	Greece	7.9	89,000	11,218,000
28	Guinea	7.8	94,000	12,092,000
29	Libya	7.7	48,000	6,235,000
30	Philippines	7.7	784,000	101,716,000
31	Timor-Leste	7.7	10,000	1,241,000
32	Nigeria	7.7	1,386,000	181,182,000
33	Uganda	7.6	304,000	40,145,000
34	Madagascar	7.5	182,000	24,234,000
35	Malawi	7.5	131,000	17,574,000
36	Guinea-Bissau	7.5	13,000	1,771,000
37	Liberia	7.4	33,000	4,500,000
38	Syrian Arab Republic*	7.3	136,000	18,735,000
39	Angola	7.2	199,000	27,859,000
40	Djibouti	7.1	7,000	927,000
41	Kenya	6.9	328,000	47,236,000
42	Malaysia	6.9	212,000	30,723,000
43	Albania	6.9	20,000	2,923,000
44	Cameroon	6.9	157,000	22,835,000
45	Togo	6.8	50,000	7,417,000

Rank	Country	Estimated prevalence (per 1,000 population)	Estimated absolute number of victims	Population
	•			·
46 47	Niger Zimbabwe	6.7 6.7	133,000 105,000	19,897,000 15,777,000
48	Turkey	6.5	509,000	78,271,000
49	Ukraine	6.4	286,000	44,658,000
50	Equatorial Guinea	6.4	7,000	1,175,000
51	Tanzania, United Republic of	6.2	336,000	53,880,000
52	Ethiopia	6.1	614,000	99,873,000
53	India	6.1	7,989,000	1,309,054,000
54	Croatia	6.0	25,000	4,236,000
55	Nepal	6.0	171,000	28,656,000
56	Côte d'Ivoire	5.9	137,000	23,108,000
57	Montenegro	5.9	4,000	628,000
58	Gambia	5.8	11,000	1,978,000
59	Lithuania	5.8	17,000	2,932,000
60	Zambia	5.7	92,000	16,101,000
61	Venezuela, Bolivarian Republic	5.6	174,000	31,155,000
OI	of	5.0	174,000	31,133,000
62	Haiti	5.6	59,000	10,711,000
63	Egypt	5.5	518,000	93,778,000
64	Russia	5.5	794,000	143,888,000
65	Moldova, Republic of	5.5	22,000	4,066,000
66	Benin	5.5	58,000	10,576,000
67	Mozambique	5.4	152,000	28,011,000
68	Armenia	5.3	16,000	2,917,000
69	Uzbekistan**	5.2	160,000	30,976,000
70	Sierra Leone	5.0	36,000	7,237,000
71	Ghana	4.8	133,000	27,583,000
72	Iraq*	4.8	174,000	36,116,000
73	Gabon	4.8	9,000	1,930,000
74	Indonesia	4.7	1,220,000	258,162,000
75	Tajikistan**	4.5	39,000	8,549,000
76	Burkina Faso	4.5	82,000	18,111,000
77	Viet Nam	4.5	421,000	93,572,000
78	Bulgaria	4.5	32,000	7,177,000
79	Azerbaijan**	4.5	43,000	9,617,000
80	Georgia	4.3	17,000	3,952,000
81	Romania	4.3	86,000	19,877,000
82	Cyprus	4.2	5,000	1,161,000
83	Kazakhstan**	4.2	75,000	17,750,000
84	Lesotho	4.2	9,000	2,175,000
85	Kyrgyzstan**	4.1	24,000	5,865,000
86	Cape Verde	4.1	2,000	533,000
87	Dominican Republic	4.0	42,000	10,528,000
88	Kosovo	4.0	8,000	1,905,000
89	Latvia	3.9	8,000	1,993,000
90	Israel	3.9	31,000	8,065,000
91	Cuba	3.8	43,000	11,461,000
92	Bangladesh	3.7	592,000	161,201,000
93	Hungary	3.7	36,000	9,784,000
94	Estonia	3.6	5,000	1,315,000
95	Mali	3.6	62,000	17,468,000
96	Botswana	3.4	8,000	2,209,000
97	Singapore	3.4	19,000	5,535,000
98	Bosnia and Herzegovina	3.4	12,000	3,536,000
99	Honduras	3.4	30,000	8,961,000
100	Poland	3.4	128,000	38,265,000
101	Serbia	3.3	30,000	8,851,000
102	Namibia	3.3	8,000	2,426,000
103	Yemen*	3.1	85,000	26,916,000
104	Trinidad and Tobago	3.0	4,000	1,360,000
105	Slovakia	2.9	16,000	5,439,000

Rank	Country	Estimated prevalence (per 1,000 population)	Estimated absolute number of victims	Population
106	Guatemala	2.9	47,000	16,252,000
107	Nicaragua	2.9	18,000	6,082,000
108	Czech Republic	2.9	31,000	10,604,000
109	Senegal	2.9	43,000	14,977,000
110	South Africa	2.8	155,000	55,291,000
111	China**	2.8	3,864,000	1,397,029,000
112	Barbados	2.7	<1,000	284,000
113 114	Colombia Mexico	2.7 2.7	131,000 341,000	48,229,000 125,891,000
115	Algeria	2.7	106,000	39,872,000
116	Guyana	2.6	2,000	769,000
117	Jamaica	2.6	7,000	2,872,000
118	Peru	2.6	80,000	31,377,000
119	El Salvador	2.5	16,000	6,312,000
120	Portugal	2.5	26,000	10,418,000
121	Morocco	2.4	85,000	34,803,000
122	Italy	2.4	145,000	59,504,000
123	Ecuador	2.4	39,000	16,144,000
124	Spain	2.3	105,000	46,398,000
125	Suriname	2.3	1,000	553,000
126	Tunisia	2.2	25,000	11,274,000
127	Slovenia	2.2	5,000	2,075,000
128	Oman*	2.1	9,000	4,200,000
129	Bolivia, Plurinational State of	2.1	23,000	10,725,000
130 131	Sri Lanka Iceland	2.1 2.1	44,000 <1,000	20,714,000 330,000
132	United Kingdom	2.1	136,000	65,397,000
133	Panama	2.1	8,000	3,969,000
134	Germany	2.0	167,000	81,708,000
135	Belgium	2.0	23,000	11,288,000
136	France	2.0	129,000	64,457,000
137	Korea, Republic of (South Korea)**	1.9	99,000	50,594,000
138	Saudi Arabia*	1.9	61,000	31,557,000
139	Bahrain*	1.9	3,000	1,372,000
140	Norway	1.8	9,000	5,200,000
141	Jordan*	1.8	17,000	9,159,000
142	Brazil	1.8	369,000	205,962,000
143	Netherlands	1.8	30,000	16,938,000
144	Austria	1.7	15,000	8,679,000
145 146	Lebanon* Switzerland	1.7 1.7	10,000 14,000	5,851,000 8,320,000
147	Ireland	1.7	8,000	4,700,000
148	United Arab Emirates*	1.7	15,000	9,154,000
149	Finland	1.7	9,000	5,482,000
150	Denmark	1.6	9,000	5,689,000
151	Paraguay	1.6	11,000	6,639,000
152	Sweden	1.6	15,000	9,764,000
153	Qatar*	1.5	4,000	2,482,000
154	Luxembourg	1.5	<1,000	567,000
155	Kuwait*	1.5	6,000	3,936,000
156	Hong Kong, China**	1.4	10,000	7,246,000
157	Argentina	1.3	55,000	43,418,000
158	United States	1.3	403,000	319,929,000
159	Costa Rica	1.3	6,000	4,808,000
160	Uruguay	1.0	4,000	3,432,000
161	Mauritius	1.0	1,000	1,259,000

Rank	Country	Estimated prevalence (per 1,000 population)	Estimated absolute number of victims	Population
162	Chile	0.8	14,000	17,763,000
163	Australia	0.6	15,000	23,800,000
164	New Zealand	0.6	3,000	4,615,000
165	Taiwan, China**	0.5	12,000	23,486,000
166	Canada	0.5	17,000	35,950,000
167	Japan**	0.3	37,000	127,975,000

\*Substantial gaps in data exist for the Arab States region and Gulf countries in particular. These gaps point to a significant underestimate of the extent of modern slavery in this region. As a result, the country-level estimates presented here are considered very conservative and should be interpreted cautiously.

\*\*Substantial gaps in data exist for the Central and East Asia subregions where, with the exception of Mongolia, surveys cannot be conducted for reasons such as (i) survey is only delivered face-to-face, (ii) survey is delivered only in the main language which many migrant workers do not speak, or (iii) national authorities would not, or were unlikely to, consent to the module on modern slavery. Unlike several countries in Western Europe where no surveys were conducted, none of the countries in these subregions were identified as sites of exploitation by respondents in the 48 countries where surveys were implemented.

Children working in a ship propeller making factory in Dhaka, Bangladesh in May, 2018. A new report by Overseas Development Institute found that child labourers living in slums worked an average of 64 hours each week, many in supply chains connected to the worlds most popular brands.

Photo credit: Zakir Hossain Chowdhury/NurPhoto via Getty Images



## Data limitations

### Limitations of the source data

As with all empirical research, there are some limitations of the data used to produce the Global Estimates of Modern Slavery, within which the findings of this Index should be interpreted.

First, the set of surveyed countries that was used to produce the 2017 Global Estimates of Modern Slavery was treated as a random sample of the world and the global figure was estimated directly from that (that is, without first calculating national estimates). However, the selection of the countries to be surveyed was not random as countries were selected for specific reasons, including:

- » Countries where prevalence is expected to be higher, thereby increasing the chance of identifying cases through a household survey. This leads to the selection of more "developing" and/or "source" countries than "developed" countries as a random sample survey is unlikely to identify cases in the latter;
- » Where the mode of delivery is through face to face surveys, as opposed to telephone interviews, and
- » To ensure regional representation so that the surveys could facilitate extrapolation.

Second, while regional estimates of prevalence of modern slavery were presented in the Global Estimates of Modern Slavery, critical gaps in available data were noted. These are particularly problematic in the Arab States, where only two national surveys were undertaken, none of which was in the Gulf Cooperation Council (GCC) countries despite the incidence of forced labour reported by different sources in such sectors as domestic work and construction in the GCC. Further, measurement of forced marriage among residents of countries within the region is particularly problematic where there are no surveys. Taken together, these gaps point to a significant underestimate of the extent of modern slavery in this region.

Similarly, it is usually not possible to survey in countries that are experiencing profound and current conflict, such as Syria, Iraq, Yemen, Libya, South Sudan, and parts of Nigeria and Pakistan. Yet it is known that conflict is a significant risk factor – the breakdown of the rule of law, the loss of social supports, and the disruption that occurs with conflict all increase risk of both forced labour and forced marriage. The lack of data from countries experiencing conflict means that modern slavery estimates in regions in which conflict countries are situated will understate the problem.

Similar coverage gaps exist for the Central and East Asia subregions where a larger number of surveys (only one in East Asia) were not able to be conducted for reasons that included: (i) mode of delivery was only by telephone, (ii) limited survey languages, (iii) consent of national authorities to the module on modern slavery was not given or was highly unlikely. Further, for countries in these subregions, none were identified as the country where exploitation took place by respondents in the 48 countries where surveys were implemented. As a result of these data gaps, the estimates for countries within these subregions are likely to be conservative.

## Limitations of the risk modelling

This analysis is not without the limitations inherent to any cross-sectional research endeavour. Our selection of variables is driven by both theoretical and statistical considerations, but unfortunately the field of modern slavery lacks a unifying causal theory that can be used to inform variable selection. Finally, we have a limited sample size of confirmed individual cases, which limits the extent to which we can expand our predictive models and enhance the accuracy of our predictions. Further surveys will lead to an increase in our sample, thereby enabling the study of more complex effects and refinement of the modelling.

## Comparability with previous estimates

Due to substantial differences in scope, methodologies, regional groupings, and expanded data sources, the 2018 Global Slavery Index is not directly comparable to the previous edition. These differences are due to the joint development of the Global Estimates of Modern Slavery and, accordingly, the changes in the estimated number of victims at the national level cannot be interpreted against the previous Global Slavery Index. It is important to note the key differences in how The Global Estimates, the 2018 Index national estimates, and the 2016 Index estimates were calculated, these include:

what we count: In the 2016 Index we identified gaps in the measurement of children across all forms of modern slavery and adults in forced sexual exploitation. These gaps were addressed when developing the methodology for the Global Estimates, which drew on both survey and administrative data from IOM to calculate sub-estimates for forced sexual exploitation and the forced labour exploitation of children. In addition, a more systematic approach to the measurement of state-imposed forced labour was adopted for The Global Estimates and is used here. The 2018 Index represents a "stock" estimate; that is, people in slavery on any given day in 2016.

- » Where we count, where exploitation happens:
- The 2016 Index had too few survey countries to consistently count victims where they were exploited, which is not the case in the 2017 Global Estimates, which are based on a much larger number of survey countries. This change had the impact of increasing the number of victims counted in developed countries, with the exception of the Arab States. As noted previously, measures in that region are hampered by insufficient data.
- » How we measure: While nationally representative surveys remain central to the process, the collaboration on a global estimate necessitated a change from the "bottom-up" approach of first calculating national estimates and then aggregating to a global total.

In the 2017 Global Estimates, the countries surveyed were treated as a random sample of the entire world and global and regional totals were estimated directly from that without first calculating national estimates. In the 2018 Index, national prevalence is calculated on the basis of a predictive model that takes individual and country-level risk factors into account. The results are then weighted such that they aggregate to the regional totals from the Global Estimates of Modern Slavery.

## **APPENDIX 2:**

## Part C: Global Slavery Index Government Response Index

Governments play a critical role in the developing and implementing the laws, policies, and programs that are needed to prevent and respond to modern slavery. To complement the prevalence estimates and assessment of vulnerability, for the third year running the Global Slavery Index includes an assessment of the actions governments are taking to respond to modern slavery.

This assessment is based on tracking government progress towards the achievement of five milestones:

- 1/ Survivors of slavery are identified and supported to exit and remain out of slavery.
- 2/ Criminal justice mechanisms function effectively to prevent modern slavery.
- 3 / Coordination occurs at the national and regional level, and governments are held to account for their response.
- 4/ Risk factors such as attitudes, social systems, and institutions that enable modern slavery are addressed
- 5 / Government and business stop sourcing goods and services produced by forced labour.

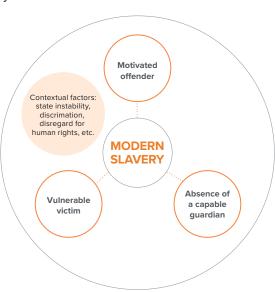
# Theoretical framework: crime prevention theory

Our starting point for the assessment of government responses is situational crime prevention theory.<sup>72</sup> This is based on the understanding that in order for the crime of modern slavery to occur, there needs to be a vulnerable victim, a motivated offender, and the absence of a capable guardian. It also recognises that crime does not happen in a vacuum, and that broad contextual factors like state instability, discrimination, and disregard of human rights are critical to any government response.

Therefore, to reduce the prevalence of crime, the government needs to:

- » Reduce the opportunity for offenders to commit the crime.
- » Increase the risks of offending.
- » Decrease the vulnerability of potential victims.
- » Increase the capacity of law enforcement and other guardians.
- » Address the people or factors that enable or facilitate slavery.

FIGURE 1
Situational crime prevention theory



## Development of the conceptual framework

Using this theoretical framework as a starting point and drawing on the 2000 UN Trafficking Protocol,<sup>73</sup> the 2014 Forced Labour Protocol (P029)<sup>74</sup> and the 2005 European Convention on Action against Trafficking Beings,<sup>75</sup> as well as on literature on effective responses to modern slavery,<sup>76</sup> we devised a conceptual framework of what constitutes a strong response to modern slavery. It is organised around the five milestones outlined above, which, if achieved, would ensure that governments are taking steps to address modern slavery. The conceptual framework was developed in consultation with an independent Expert Working Group and is based on findings from NGO research and scholars in fields related to modern slavery, such as harmful traditional practices, health, social welfare, and migration.<sup>77</sup> The full conceptual framework can be found in Table 8.

## **Process**

In 2018, data was collected for 181 countries for the government response component of the Index. For the first time, we have included data on 53 Commonwealth countries in our government response database. As data for the smaller island nations of the Commonwealth were limited, we have not provided an overall rating for these individual countries. Due to ongoing conflict and extreme disruption to government, we have not included ratings for Afghanistan, Iraq, South Sudan, Syria, and Yemen this year.

The five milestones underpinning the conceptual framework are then broken down into activities, which are further disaggregated into indicators. There is a total of 104 indicators in the conceptual framework and 28 activities. The breakdown by milestone is described in Table 1 below.

TABLE 1
Breakdown of milestones into activities and indicators

Milestone	No. of activities	No of indicators
Survivors of slavery are identified and supported to exit and remain out of slavery	9	31
Criminal justice mechanisms function effectively to prevent modern slavery	6	33
Coordination occurs at the national and regional level, and governments are held to account for their response	4	10
Risk factors such as attitudes, social systems, and institutions that enable modern slavery are addressed	7	19
Government and business stop sourcing goods and services produced by forced labour	2	11
Total:	28*	104

<sup>\*</sup> Taiwan and Kosovo have 27 activities, not 28, as they are unable to ratify international conventions.

## Data collection

Data are collected at the indicator level, where each indicator describes an element of an activity. Take activity 2.1 under milestone 1, "A reporting mechanism exists where modern slavery crimes can be reported," as an example:

#### **TABLE 2**

Activity 2.1, Milestone 1

Milestone 1: Survivors of slavery are identified and supported to exit and remain out of slavery		
Activity: A reporting mechanism exists where modern slavery crimes can be reported	Indicators	
	2.1.1 A reporting mechanism exists	
	2.1.2 Reporting mechanism is available for men, women, and children	
	2.1.3 Reporting mechanism is free to access	
	2.1.4 Reporting mechanism operates 24/7	
	2.1.5 Reporting mechanism operates in multiple languages or has capacity to provide immediate access to bring in translators	

There are five indicators under this activity, each of which determines the existence of the reporting mechanism and how well it is operating. Desk research was conducted for these indicators and others in the conceptual framework by a team of 37 researchers and research assistants following a strict protocol that described both the types of reports and sources to be reviewed and what constitutes "relevant" information. The multilingual team<sup>80</sup> conducted research either by country or by indicator and saved these references in the government response database.<sup>81</sup>

These data points were then verified, as far as possible, by NGO contacts within each country. NGOs were given the opportunity to either respond via email, hold Skype interviews, or complete a survey. More than 60 survey responses were received, and a further 51 NGOs responded to individual requests for information via email or via Skype.

Regenesys BPO, an outsourcing company based in the Philippines, provides computer-based employment to trafficking survivors to enable the last mile of their re-integration. Survivors gain skills to become professionals in data entry, bookkeeping, accounting, research, postproduction photo and video editing.

Photo credit: Regenesys BPO



#### Multinational team

For the 2018 edition of the Government Response Index, we used a multinational team of 37 researchers. The University of Nottingham provided 13 PhD students from five countries, who were joined by a team of researchers and research assistants in Western Australia, the United States, and the Philippines.

The Rights Lab at the University of Nottingham collaborated on the 2018 assessment of government responses and on additional data-mapping. A team of 13 Nottingham researchers from multiple disciplines, directed by Katharine Bryant (Walk Free Foundation), worked on the assessment of government responses for 89 countries. The Rights Lab is led by Zoe Trodd, Kevin Bales and Todd Landman.

### Creation of a database

All data collected for our assessment of government responses since 2014 are available online; a total of nearly 100,000 datapoints. Ratings are available for 2016 and 2018. See https://www.globalslaveryindex.org/data/.



## Rating

Ninety of the 104 indicators in the conceptual framework are what we have called "positive indicators." Put simply, these cover the actions the government is taking to achieve each activity and milestone. The indicators described in table 2 are all positive indicators.

These indicators are supplemented by 14 standardised "negative indicators," which attempt to measure implementation of a particular activity. For example, if shelters exist for modern slavery victims, the negative indicator "victims are detained and unable to leave the shelter" would capture whether victims are detained and experience secondary victimisation despite the existence

of these shelters. The negative indicators also cover broader factors, which if conducted by governments would increase the risk of human trafficking and child exploitation. These include state-sanctioned forced labour, high levels of government complicity, criminalisation of victims, deportation of potential victims, and policies that tie migrant workers to their employers.

All 14 negative indicators can be roughly divided into two categories; those actions that have a negative impact on identified victims of modern slavery, and those policies or laws that enable or facilitate modern slavery to occur.

TABLE 3

Example of negative implementation indicators, Activity 3.1, Milestone 1

Milestone 1: Survivors of slavery are identified and	Milestone 1: Survivors of slavery are identified and supported to exit and remain out of slavery						
Activity 3.1: Victim determined support is available for all identified victims	Indicators:						
	3.1.1 Victim support services are available for suspected victims of modern slavery (men, women, and children where relevant)						
	3.1.2 <b>NEGATIVE</b> Suspected victims are held in shelters against their will and do not have a choice about whether or not to remain in a shelter						
	3.1.3 Government contributes to the operational costs of the shelters and there are no significant resource gaps						
	3.1.4 Physical and mental health services are provided to victims of modern slavery						
	3.1.5 <b>NEGATIVE</b> Victim support services are not available for all victims of modern slavery						
	3.1.7 <b>NEGATIVE</b> No victims have accessed the services or shelters						

#### TABLE 4

14 negative indicators, grouped by type of indicator

Policies or laws that have negative impact on identified victims of modern slavery	Policies or laws that facilitate the occurrence of modern slavery
M1 2.2.4 There is evidence that police officers have not identified victims of modern slavery in the last 12 months	M2 1.2.7 Criminal laws have disproportionate penalties
M1 3.1.2 Suspected victims do not have a choice about whether or not to remain in a shelter	<b>M2 3.1.3</b> Specialist police units do not have necessary resources to be able to operate effectively
<b>M1 3.1.5</b> Victim support services are not available for all victims of modern slavery	<b>M2 3.2.5</b> Judicial punishments are not proportionate to severity of the crime and complicity of the offender.
M1 3.1.7 No victims have accessed the services or shelters since 1 March 2016	<b>M4 1.4.3</b> Complicity in modern slavery cases is widespread and not investigated
<b>M2 1.4.5</b> There is evidence that victims of modern slavery have been treated as criminals for conduct that occurred while under control of criminals	<b>M4 1.6.7</b> Patterns of abuse of labour migrants are widespread and unchecked
M3 3.2.4 Foreign victims are not identified AND/ OR are detained and deported	<b>M4 1.6.9</b> There are laws or policies that prevent or make it difficult for workers to leave abusive employers without punishment
	<b>M4 1.7.5</b> Diplomatic staff are not investigated or prosecuted for alleged complicity or abuse in modern slavery cases.
	M4 1.8.1 State-sanctioned forced labour exists

Once data had been collected and verified, each indicator was scored on a 0 to 1 scale. On this scale, 0 meant no information was identified or available, or information explicitly demonstrated that the government did not meet any indicators; 1 meant that the indicator had been met. Negative indicators were scored on a 0 to -1 scale. On this scale, 0 meant no information was identified or available, or information explicitly demonstrated that the government did not meet any indicators; -1 meant that the indicator had been met. As an advocacy tool, we have retained our rating where no information found is rated as 0. However, in the government response database, we have identified those indicators for which we have consistently since 2014 failed to identify any information.

The data and ratings then went through a series of quality checks – first by country, where each country was reviewed against the rating descriptions to determine if ratings were

sound. Then, following data collection, each indicator was reviewed across all countries to check for consistency in the applied logic. Any edits were then reviewed before final edits were made in the database.

The data were then exported to an Excel spreadsheet and the final scoring applied. Each activity is weighted equally so that a country can obtain a total of 28 points. This does lead to an implicit weighting of milestones, where the more activities in a milestone, the more weight the milestone is given. Table 5 describes the implicit milestone weightings. Two negative indicators (widespread, un-investigated official complicity in modern slavery cases and state-imposed forced labour) were then subtracted from the total. The final score was presented as a percentage, which was then converted into a rating, based on equal increments of 10 (Table 6). Finally, any government that was found to have any negative indicators was capped at a BBB rating.

TABLE 5
Implicit weighting of each milestone

Milestone	No. of activities	Percentage weight
Survivors of slavery are identified and supported to exit and remain out of slavery	9	32%
Criminal justice mechanisms function effectively to prevent modern slavery	6	21%
Coordination occurs at the national and regional level, and governments are held accountable for their response	4	14%
Risk factors such as attitudes, social systems and institutions that enable modern slavery are addressed	7	25%
Government and business stop sourcing goods and services that use modern slavery	2	7%
Total:	28*	100%**

<sup>\*</sup> Taiwan and Kosovo have 27 activities, not 28, as they are unable to ratify international conventions.

<sup>\*\*</sup>Percentages add to total of 99% due to rounding

TABLE 6
Rating descriptions

Rating	Numerical Range	Description
AAA	90 to 100	The government has implemented an effective and comprehensive response to all forms of modern slavery, with effective emergency and long-term reintegration victim support services, a strong criminal justice framework, high levels of coordination and collaboration, measures to address all forms of vulnerability, and strong government procurement policies and legislation to ensure that slavery is not present in business supply chains. There is no evidence of criminalisation or deportation of victims.
АА	80 to 89.9	The government has implemented a comprehensive response to most forms of modern slavery, with strong victim support services, a robust criminal justice framework, demonstrated coordination and collaboration, measures to address vulnerability, and government procurement guidelines and/or supply chain policies or legislation to ensure that slavery is not present in business supply chains.
А	70 to 79.9	The government has implemented key components of a holistic response to modern slavery, with strong victim support services, a strong criminal justice framework, demonstrated coordination and collaboration, measures to address vulnerability, and may have taken action to ensure that government procurement policies do not encourage slavery and/or supply chain policies or legislation to ensure that slavery is not present in business supply chains.
BBB	60 to 69.9	The government has implemented key components of a holistic response to some forms of modern slavery, with victim support services, a strong criminal justice response, evidence of coordination and collaboration, and protections in place for vulnerable populations. Governments may be beginning to address slavery in supply chains of government procurement, or of businesses operating within their territory. There may be evidence that some government policies and practices may criminalise and/or cause victims to be deported.
ВВ	50 to 59.9	The government has introduced a response to modern slavery that includes short-term victim support services, a criminal justice framework that criminalises some forms of modern slavery, a body to coordinate the response, and protection for those vulnerable to modern slavery. There may be evidence that some government policies and practices may criminalise and/or cause victims to be deported and/or facilitate slavery.
В	40 to 49.9	The government has introduced a response to modern slavery with limited victim support services, a criminal justice framework that criminalises some forms of modern slavery (or has recently amended inadequate legislation and policies), a body or mechanisms that coordinate the response, and has policies that provide some protection for those vulnerable to modern slavery.  There is evidence that some government policies and practices may criminalise and/or deport victims and/or facilitate slavery. Services may be provided by International Organisations (IOs)/NGOs with international funding, sometimes with government monetary or in-kind support.
ccc	30 to 39.9	The government has a limited response to modern slavery, with limited victim support services, a criminal justice framework that criminalises some forms of modern slavery, and has policies that provide some protection for those vulnerable to modern slavery. There may be evidence of a National Action Plan and/or national coordination body. There may be evidence that some government policies and practices may criminalise and/or deport victims and/or facilitate slavery. Services may be largely provided by IOs/ NGOs with international funding, with limited government funding or in-kind support.
CC	20 to 29.9	The government has a limited response to modern slavery, with largely basic victim support services, a limited criminal justice framework, limited coordination or collaboration mechanism, and few protections for those vulnerable to modern slavery. There may be evidence that some government policies and practices facilitate slavery. Services are largely provided by IOs/NGOs with limited government funding or in-kind support.
С	10 to 19.9	The government response to modern slavery is inadequate, with limited and/or few victim support services, a weak criminal justice framework, weak coordination or collaboration, while little is being done to address vulnerability. There are government practices and policies that facilitate slavery. Services, where available, are largely provided by IOs/NGOs with little government funding or in-kind support.
D	<0 to 9.9	The government has a wholly inadequate response to modern slavery, and/or there is evidence of government-sanctioned modern slavery. However, countries in this category may be experiencing high levels of poverty and internal conflict that may prevent or hinder a response to modern slavery.

## Limitations

Collecting data for 104 indicators across 181 countries is a complicated undertaking. Access to data is limited for indicators where information is not publicly available or in languages spoken by the research team. The absence of Arabic and Portuguese speakers prevented verification with NGOs in countries where these are the primary languages spoken. Limits also remain in measuring the implementation of a response; while the negative indicators and NGO verification are the first steps in measuring this, more remains to be done in getting at the reality of what is occurring on the ground as opposed to what is reported publicly.

## Comparability

The government response assessment is comparable to previous iterations of the Index. However, there are two caveats on this.

First, following the release of the 2016 Index we conducted a review of all indicators in the conceptual framework. This was to tighten up the rating descriptions to ensure consistency in the application of rating logic and to review the language of certain indicators and their rating descriptions. This led to various language edits to the indicators, which are available on request. During this review we re-examined milestone 5 against the UN Guiding Principles and the UK Modern Slavery Act, and we consulted a series of experts in the business and human rights field. Table 7 shows the 2016 indicators against the updated 2018 indicators.

Second, we altered our overall scoring to apply more weight to the two negative indicators on state-imposed forced labour (M4 1.8.1) and official complicity (M4 1.4.3). This gives both these indicators the same weight as "activities," which is a slightly higher weight than in 2016. This is based on the premise that if a country is not taking action to tackle official complicity, or is itself complicit in forced labour, this undermines the entire government response.

TABLE 7
Government response rating by country

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
А	Netherlands	72.2	72.2	75.0	92.9	36.7	75.2
BBB*	United States	92.6	75.6	56.3	66.7	65.0	71.7
BBB*	United Kingdom	82.0	73.9	62.5	73.8	26.7	71.5
BBB	Sweden	73.1	64.4	81.3	73.8	18.3	68.7
BBB	Belgium	72.2	53.9	87.5	73.8	36.7	68.3
BBB	Croatia	77.0	78.3	56.3	69.0	18.3	68.2
BBB	Spain	79.3	65.6	62.5	73.8	0.0	66.9
BBB	Norway	68.1	82.8	56.3	73.8	10.0	66.8
BBB	Portugal	62.6	69.4	68.8	83.3	8.3	66.3
BBB	Montenegro	79.3	70.0	56.3	61.9	0.0	64.0
BBB	Australia	69.6	75.0	56.3	69.0	0.0	63.8
BBB	Cyprus	68.1	77.8	56.3	61.9	18.3	63.4
BBB	Macedonia, the former Yugoslav Republic of	70.4	67.2	75.0	61.9	0.0	63.2
BBB	Austria	72.8	61.1	68.8	61.9	18.3	63.1
BBB	Georgia	74.1	63.9	56.3	69.0	0.0	62.8
BBB	Argentina	70.0	70.6	62.5	78.6	0.0	62.6
BBB	Chile	76.5	53.9	50.0	76.2	0.0	62.3
BBB	Italy	58.3	78.9	50.0	83.3	26.7	62.0
BBB	Serbia	63.9	75.0	56.3	69.0	0.0	61.9
BBB	France	42.4	71.7	93.8	71.4	18.3	61.5
BBB	Latvia	47.0	61.7	93.8	71.4	18.3	60.9
BBB	Switzerland	66.7	60.6	37.5	81.0	0.0	60.0
BB	Albania	72.8	63.3	68.8	66.7	0.0	59.9
BB	Slovenia	60.4	57.8	56.3	73.8	18.3	59.6
BB	Lithuania	46.3	62.8	68.8	78.6	18.3	59.1
BB	Canada	52.4	72.8	75.0	61.9	0.0	58.6
BB	Jamaica	50.6	72.8	75.0	64.3	0.0	58.6
BB	Denmark	62.6	56.1	50.0	69.0	28.3	58.6
BB	Hungary	64.8	47.2	56.3	71.4	18.3	58.2
BB	Dominican Republic	69.1	78.3	37.5	69.0	0.0	58.0
BB	Finland	53.7	49.4	81.3	71.4	8.3	57.9
BB	Ireland	65.9	42.2	62.5	69.0	18.3	57.7
ВВ	New Zealand	53.7	47.8	43.8	95.2	0.0	57.6
BB	Germany	61.7	57.8	56.3	57.1	36.7	57.1
ВВ	Bulgaria	59.8	49.4	56.3	66.7	18.3	55.8
BB	Philippines	51.5	69.4	50.0	69.0	0.0	55.8
ВВ	Moldova, Republic of	58.5	61.1	62.5	59.5	0.0	55.7
BB	Brazil	38.9	47.8	87.5	73.8	26.7	55.6
ВВ	Greece	68.5	66.1	43.8	45.2	18.3	55.1
BB	Kosovo	66.7	62.7	37.5	59.5	0.0	54.8
BB	Poland	53.3	42.2	68.8	69.0	8.3	53.9
BB	Armenia	54.6	51.1	56.3	66.7	0.0	53.2
BB	Slovakia	48.7	52.2	62.5	64.3	18.3	53.2
BB	Ukraine	65.7	46.1	62.5	66.7	0.0	53.0
ВВ	Czech Republic	47.0	54.4	81.3	50.0	28.3	52.9
BB	Peru	75.9	42.2	62.5	54.8	0.0	52.5
BB	Mexico	53.7	62.8	56.3	69.0	0.0	52.4
BB	Israel	57.2	56.1	43.8	61.9	0.0	52.1
BB	Indonesia	47.8	60.0	50.0	61.9	0.0	50.8
BB	Uruguay	40.6	49.4	50.0	78.6	0.0	50.4
BB	Costa Rica	53.7	41.7	62.5	59.5	0.0	50.0
В	Trinidad and Tobago	67.2	50.0	31.3	66.7	0.0	49.9
В	Thailand	46.3	51.7	56.3	73.8	0.0	48.9
В	Estonia	41.3	36.1	43.8	81.0	18.3	48.8

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
В	Bosnia and Herzegovina	60.2	47.8	25.0	76.2	0.0	48.6
В	Azerbaijan	28.0	71.7	62.5	59.5	0.0	48.2
В	Vietnam	62.2	45.0	62.5	66.7	0.0	48.1
В	United Arab Emirates	63.0	41.1	56.3	42.9	0.0	47.8
В	South Africa	53.7	61.7	43.8	57.1	0.0	47.4
В	Turkey	66.7	57.2	37.5	33.3	0.0	47.4
В	Senegal	49.6	43.9	56.3	54.8	0.0	47.1
В	Ecuador	61.1	55.6	37.5	52.4	0.0	46.4
В	Iceland	48.7	54.4	37.5	52.4	8.3	46.4
В	Nicaragua	34.4	70.0	25.0	66.7	0.0	46.3
В	Sierra Leone	53.7	37.8	50.0	54.8	0.0	46.2
В	Nigeria	58.9	53.3	50.0	47.6	0.0	45.8
В	India	46.3	53.3	56.3	45.2	0.0	45.7
В	Luxembourg	47.4	33.9	68.8	50.0	8.3	45.4
В	Guatemala	42.2	25.6	62.5	69.0	0.0	45.2
В	Bangladesh	43.1	63.3	68.8	42.9	0.0	44.4
В	Tunisia	53.0	31.7	43.8	57.1	0.0	44.3
В	Romania	53.3	52.2	50.0	42.9	18.3	43.9
В	Panama Cote d'Ivoire	32.6	60.0	31.3	78.6	0.0	43.9
B B		34.4 48.1	36.7 51.7	43.8 37.5	66.7 54.8	0.0	42.4 42.0
В	Uganda Bolivia, Plurinational State of	21.3	43.9	62.5	61.9	8.3	41.3
В	Colombia	40.4	43.9	62.5	69.0	0.0	41.3
В	Kyrgyzstan	33.0	48.3	56.3	61.9	0.0	40.9
В	Paraguay	26.1	56.7	37.5	71.4	10.0	40.9
В	Mozambique	57.6	49.4	31.3	42.9	0.0	40.7
В	Belarus	48.9	27.8	37.5	66.7	0.0	40.1
В	Egypt	37.6	30.6	62.5	64.3	0.0	40.1
CCC	Haiti	49.6	42.8	18.8	47.6	0.0	39.7
CCC	Barbados	53.3	26.1	37.5	45.2	0.0	39.4
CCC	Nepal	35.2	41.7	50.0	59.5	0.0	38.7
CCC	Jordan	48.1	42.8	31.3	38.1	0.0	38.6
CCC	Malaysia	40.0	53.9	56.3	38.1	0.0	38.4
CCC	Lesotho	35.9	37.2	56.3	42.9	0.0	38.3
CCC	Taiwan	46.9	38.7	25.0	42.9	8.3	38.2
CCC	Benin	30.6	31.7	56.3	52.4	0.0	37.7
CCC	Cambodia	40.4	46.7	43.8	33.3	0.0	37.6
CCC	El Salvador	31.7	39.4	43.8	64.3	0.0	37.4
CCC	Sri Lanka	26.7	42.8	25.0	78.6	0.0	37.4
CCC	Honduras	27.6	25.6	62.5	54.8	0.0	37.0
CCC	Japan	43.5	44.4	37.5	45.2	0.0	36.6
CCC	Morocco	6.5	56.7	31.3	71.4	0.0	36.5
CCC	Kenya	35.7	38.9	37.5	59.5	0.0	36.5
CCC	Algeria	29.4	47.2	37.5	45.2	0.0	36.3
CCC	Ethiopia	27.8	51.1	56.3	47.6	0.0	36.3
CCC	Burkina Faso	38.1	30.0	43.8	42.9	0.0	35.7
CCC	Qatar	53.0	31.7	31.3	42.9	0.0	35.4
CCC	Djibouti	30.4	42.8	31.3	47.6	0.0	35.3
CCC	Mauritius	43.7	38.9	0.0	50.0	0.0	34.9
CCC	Lao People's Democratic Republic	38.9	36.7	50.0	40.5	0.0	34.0
CCC	Gambia	25.0	48.3	37.5	40.5	0.0	33.9
CCC	Rwanda	36.9	41.7	43.8	54.8	0.0	33.6
CCC	Namibia	34.1	27.8	18.8	54.8	0.0	33.3
CCC	Botswana	32.2	45.6	37.5	45.2	0.0	33.2
CCC	Tajikistan	38.9	36.1	43.8	40.5	0.0	33.0

Rating	Country	Support survivors	Criminal justice	Coordination	Address risk	Supply chains	TOTAL
CCC	Kazakhstan	42.8	50.0	37.5	26.2	0.0	32.8
CCC	Singapore	40.0	22.2	31.3	42.9	0.0	32.8
CCC	Tanzania, United Republic of	37.2	41.7	25.0	47.6	0.0	32.8
CCC	Bahrain	55.2	37.2	18.8	31.0	0.0	32.6
CCC	Myanmar	58.0	18.3	43.8	42.9	0.0	32.4
CCC	Oman	32.4	22.8	12.5	59.5	0.0	32.0
CCC	Madagascar	38.7	52.8	18.8	50.0	0.0	31.8
CCC	Zambia	33.3	34.4	25.0	40.5	0.0	31.8
CCC	Liberia	28.0	26.7	31.3	50.0	0.0	31.7
CCC	Guyana	33.1	44.4	25.0	45.2	0.0	31.5
CCC	Lebanon	33.9	30.0	31.3	38.1	0.0	31.3
CCC	Mali	38.9	35.6	50.0	28.6	0.0	30.8
CCC	Mongolia	27.8	33.3	31.3	54.8	0.0	30.7
CCC	Uzbekistan	30.2	33.9	31.3	64.3	0.0	30.4
CC	Angola	31.5	13.9	43.8	54.8	0.0	29.5
CC	Swaziland	36.3	18.3	37.5	47.6	0.0	29.3
CC	Timor-Leste	33.1	16.7	25.0	42.9	0.0	28.5
CC	Venezuela, Bolivarian Republic of	23.3	43.9	12.5	52.4	0.0	28.2
CC	Saudi Arabia	32.4	42.8	37.5	26.2	0.0	27.9
CC	Kuwait	28.7	33.9	25.0	45.2	0.0	27.8
CC	Korea, Republic of (South Korea)	35.9	27.8	12.5	33.3	0.0	27.6
CC	Ghana	24.8	33.3	37.5	40.5	8.3	27.6
CC	China	23.5	29.4	43.8	52.4	18.3	27.4
CC	Suriname	24.3	5.6	31.3	54.8	0.0	27.1
CC	Turkmenistan	17.8	40.0	31.3	61.9	0.0	27.1
CC	Malawi	33.1	23.9	43.8	33.3	0.0	26.8
CC	Niger	29.1	35.6	25.0	35.7	0.0	25.9
CC	Cameroon	26.7	24.4	18.8	50.0	0.0	25.4
CC	Gabon	27.8	11.7	31.3	33.3	0.0	24.2
CC	Togo	28.7	21.1	31.3	21.4	0.0	23.6
CC	Cape Verde	23.5	16.1	25.0	33.3	0.0	22.9
CC	Hong Kong Cuba	30.2 13.0	10.0	12.5 18.8	31.0 42.9	0.0	21.4 20.8
CC	Russia	17.0	15.0 32.2	37.5	42.9	0.0	20.8
CC	Brunei Darussalam	17.8	19.4	0.0	40.5	0.0	20.7
С	Guinea	8.7	10.6	37.5	50.0	0.0	19.3
С	Zimbabwe	11.7	17.2	43.8	35.7	0.0	19.0
С	Papua New Guinea	26.5	30.6	6.3	26.2	0.0	18.9
С	Congo, Democratic Republic of the	25.9	24.4	37.5	14.3	0.0	18.9
С	Guinea-Bissau	7.4	31.1	31.3	21.4	0.0	18.9
С	Pakistan	21.5	15.6	12.5	40.5	0.0	18.6
С	Chad	16.7	13.9	12.5	40.5	0.0	16.7
С	Somalia	8.1	20.6	25.0	35.7	0.0	16.0
С	Mauritania	6.5	25.0	18.8	35.7	0.0	15.5
С	Sudan	2.8	26.7	25.0	33.3	0.0	14.9
С	Congo	8.3	6.7	25.0	42.9	0.0	14.8
С	Burundi	22.2	11.1	12.5	26.2	0.0	10.7
D	Equatorial Guinea	3.7	12.2	12.5	26.2	0.0	8.6
D	Iran, Islamic Republic of	7.4	9.4	0.0	23.8	0.0	6.8
D	Central African Republic	-3.7	0.6	12.5	21.4	0.0	2.5
D	Eritrea	0.0	-1.1	0.0	21.4	0.0	-2.0
D	Libya	0.0	21.7	0.0	0.0	0.0	-2.5
D	Korea, Democratic People's Republic of (North Korea)	0.0	-6.7	12.5	4.8	0.0	-5.6



Sara Zone, Italy. Migrants resting in the boat Open Arms after being rescued. Three hundred and seventy-eight migrants were rescued by the Spanish NGO Proactiva Open Arms as they travelled from Libya. Since the beginning of the year, nearly 3.000 people have lost their lives in the Mediterranean Sea. Migrants keep on trying to leave Libya because they say that life in Libya is really difficult.

Photo credit: Samuel Nacar/SOPA Images/LightRocket via Getty Images

TABLE 7

## Updated Milestone 5

Indicator 2016	Indicator description 2016	Indicator 2018	Indicator description for GSI 2018
M5 1.1.2 Public procurement policies and systems exist to minimise the risk of governments purchasing products tainted by forced labour.	The government drafts and implements public procurement policies that outline standards for public procurement, which explicitly prohibit using businesses suspected of using forced labour or purchasing products that were made using forced labour.  These policies will ideally have implementation guidelines and tools on how to establish compliance, such as conducting risk assessments and developing compliance plans, and a time period to establish compliance framework.	M5 1.1.1 (edited) Guidelines exist for public procurement officials.	The government has drafted guidelines or an internal memo for public procurement officials that outline standards and/or operating procedures to prevent use of modern slavery in the purchase of public goods or services. These guidelines can include general guidelines on human rights that include sub-sections on modern slavery.
M5 1.1.2 Public procurement policies and systems exist to minimise the risk of governments purchasing products tainted by forced labour.	The government drafts and implements public procurement policies that outline standards for public procurement, which explicitly prohibit using businesses suspected of using forced labour or purchasing products that were made using forced labour.  These policies will ideally have implementation guidelines and tools on how to establish compliance, such as conducting risk assessments and developing compliance plans, and a time period to establish compliance framework.	M5 1.1.2 (edited) Public procurement policies and systems exist to minimise the risk of governments purchasing products tainted by forced labour.	The government drafts and implements public procurement policies that outline standards for public procurement, which explicitly prohibit using businesses suspected of using forced labour, or purchasing products that were made using forced labour. These policies can include inserting clauses in public contracts prohibiting the use of forced labour, not making purchasing decisions on price alone, steps to be taken should a contractor be found to use forced labour, or requiring government contractors over a certain value to maintain compliance plans.
M5 1.1.3 Annual reports on forced labour in government supply chains are produced and publicly available.	If yes to 1.1.2, the government releases annual reports on implementation of the above laws or policies or releases information on levels of compliance at all stages of public procurement and this has to have occurred in the period from 1 June 2014 to 31 August 2015 or if the policy has just been adopted, it is enough that reporting is stipulated as part of regulating compliance.	M5 1.1.3 (edited) Annual reports on government action to prevent use of forced labour in public procurement are produced and publicly available.	The government releases reports on activities taken to prevent use of forced labour in public procurement AND This has to have occurred since 30 June 2012OR If the policy has been adopted in the last two years (since 1 February 2015), it is enough that reporting is stipulated as part of regulating compliance. The report can also be on human rights, but include a sub-section on modern slavery.
		M5 1.1.4 (addition) The government has provided training to public procurement officials on modern slavery.	The government has provided training to procurement officials on what is modern slavery, how it is relevant to their role and to existing government policies and their implementation. This training is provided face-to-face, or through online training modules, and has occurred at least once since 30 June 2012.
		M5 1.1.5 (addition) There is evidence that the government has taken remedial action where forced labour has been discovered.	There is evidence that the government has worked with contractors to implement corrective action plans for those who have identified issues with the use of forced labour or where the use of forced labour is prevalent and the contractor is unwilling to work with the government, there is evidence that the government has cancelled the contract and this has occurred since 30 June 2012.

Indicator 2016	Indicator description 2016	Indicator 2018	Indicator description for GSI 2018
M5 1.2.1 Laws or policies require businesses to report on their actions to implement risk minimisation policies.	Legislation or policy requires businesses to report on their actions to minimise risk of forced labour in their supply chain.	M5 2.1.1 (edited) Laws or policies require businesses to report on their actions to implement risk minimisation policies.	Legislation or policies require business to report on their actions to minimise risk of forced labour in their supply chain. (For example, the UK Modern Slavery Act requires businesses earning over £36 million per annum to report on their actions to combat modern slavery.)
		M5 2.1.2 (addition) Governments have identified high-risk sectors and taken action to work with these sectors to eradicate modern slavery.	The government has collaborated with businesses to identify high-risk sectors and set up national sector-specific initiatives that support businesses to tackle modern slavery. These can be broader initiatives that include sustainability, health and safety, etc., but must include some elements of tackling modern slavery. (One example is the sustainable textile partnership in Germany.)
M5 1.2.2 Laws or policies require businesses to have transparent, risk-minimisation strategies in place that will identify and respond to a case of modern slavery in their supply chains.	Legislation or policy requires businesses to have risk-minimisation policies to operate within the country.  The legislation or policy MUST have, or be supported by, guidelines on how to implement it and penalties for non-compliance.	M5 2.1.3 (edited) Laws or policies allow governments to create a public list of businesses who have been found to tolerate slavery in their supply chains.	The government has worked with businesses and NGOs to create a public list of businesses that have been found to tolerate forced labour in their supply chains and/or these businesses are prevented from accessing public funds. (For example, the "Dirty List" in Brazil.)
M5 1.2.3 Governments implement a responsible investment reporting requirement for investment funds and banks headquartered in their country to ensure that investment does not support modern slavery.	Investment funds and banks headquartered the country have to report on modern slavery risk in investments and reporting must occur at least every two years. If policy is in place, there must be evidence that this has occurred since 1 September 2010 or if the policy has just been adopted, it is enough that reporting is stipulated as part of regulating compliance.	M5 2.1.4 (edited) The government implements a responsible investment reporting requirement for investment funds and banks headquartered in the country to ensure that investment does not support modern slavery.	Investment funds and banks headquartered the country have to report on modern slavery risk in investments and reporting must occur at least every two years. If policy is in place, there must be evidence that this has occurred since 30 June 2012 or if the policy has just been adopted, it is enough that reporting is stipulated as part of regulating compliance.
		M2 2.1.5 (addition) Laws or policies prevent the import of goods and services made with forced labour.	The government has prohibited the import of goods and services made with forced labour. (For example, the US Tariff Act.)
M5 1.2.4 Laws are in place that make it a criminal offence for company directors or companies to fail to prevent modern slavery from being utilised in their business' first tier supply chain.	If yes to 1.1.2 or 1.2.1, then: Legislation has strict liability offences, meaning directors can be held accountable for slavery in first tier supply chains where policies do not exist OR Legislation has vicarious liability offences where a company can be held accountable for slavery in first tier supply chains where policies do not exist.	M2 2.1.6 (edited) Laws are in place that make it a criminal offence for company directors or companies to fail to undertake reasonable due diligence in first tier supply chains.	Directors can be charged and prosecuted for slavery in first tier supply chains where it can be shown that due diligence has not occurred. This indicator measures the existence of this provision in legislation.

TABLE 8
Conceptual framework for measuring government responses

Milestone 1: Su	rvivors of slavery	are identified and sup	ported to exit and remain out of modern slavery
OUTCOME	ACTIVITY	INDICATOR 2017/8	RATING DESCRIPTION
Increase (and eventual decrease) in reported cases of modern slavery	1.1 The public knows what modern slavery is and how to report it	1.1.1 National campaigns provide information on how to report and identify victims to members of the general public	Campaigns on how to identify OR report potential victims, such as promotion of a hotline, website or text messaging details or distributing indicators of modern slavery  AND must be distributed to the general public at the NATIONAL level.  NOT training for government officials, NGOs, Embassy staff, health and social workers AND occurred once since 30 June 2012.  NOT general awareness campaigns which do not mention hotline or indicators of trafficking.  NOT Information is distributed to at risk or specific populations or geographic locations, such as migrant workers or at-risk communities. This is covered under milestone 4, 1.2.1.
		1.1.2 These campaigns are distributed systematically and at regular intervals (as distinct from one-off, isolated)	If yes to 1.1.1, information has been distributed annually since 30 June 2012 OR information is promoted regularly through social media AND there is evidence this online promotion has been regularly updated (at least once since 1 February 2016- please refer to date of Facebook posts, or date of tweets etc).  If no to 1.1.1, indicator not met.
		1.1.3 There has been an increase in number of members of the public reporting cases of modern slavery	If yes to 1.1.1, there has been an increase in public reports of modern slavery cases in recent years  AND this increase in reports is related to the campaign  OR has occurred since the campaign has been distributed to the general public AND this must have occurred since 30 June 2012.  If no to 1.1.1, indicator not met.
	2.1 Comprehensive reporting mechanisms operate effectively	2.1.1 A reporting mechanism exists, such as a hotline	Reporting mechanism exists where modern slavery crimes can be reported (either in isolation or as part of a larger phone service)  This includes text messaging, an online form or phone hotline  AND This reporting mechanism must be operational between 1 February 2016 and 30 June 2017.  If multiple hotlines exist covering different populations, please rate as indicator met.
		2.1.2 Reporting mechanism is available for men, women and children	If yes to 2.1.1, this reporting mechanism is available for men, women and children to report cases of modern slavery  OR there are separate hotlines that cover men, women and children NOT a single hotline exists where women or children can report, but nowhere for men to report exploitation.  Please refer to the most relevant reporting mechanism identified in 2.1.1 for indicators 2.1.2 through to 2.1.5.  Modern slavery/ trafficking hotline would be most relevant, followed by those which cover sub-populations (e.g. for women and/or children).  If multiple hotlines exist covering all populations, please rate as indicator met. If some populations are not covered, please rate as indicator not met.
		2.1.3 Reporting mechanism is free to access	If yes to 2.1.1, this reporting mechanism is free to access.  If no to 2.1.1, indicator not met.  Please refer to the most relevant reporting mechanism identified in 2.1.1 for indicators 2.1.2 through to 2.1.5.  Modern slavery/ trafficking hotline would be most relevant, followed by those which cover sub trafficking populations (e.g. for women and/or children).  If multiple hotlines exist covering different populations and all are free, please rate as indicator met. If some of the available and relevant hotlines are not free, please rate as indicator not met.

OUTCOME	ACTIVITY	INDICATOR 2017/8	RATING DESCRIPTION
		2.1.4 Reporting mechanism operates 24/7	If yes to 2.1.1, this reporting mechanism operates 24/7. If no to 2.1.1, indicator not met.  Please refer to the most relevant reporting mechanism identified in 2.1.1 for indicators 2.1.2 through to 2.1.5.  Modern slavery/ trafficking hotline would be most relevant, followed by those which cover sub trafficking populations (e.g. for women and/or children). If multiple hotlines exist covering different populations and all are available 24/7, please rate as indicator met. If some hotlines are not available 24/7, please rate as indicator not met.
		2.1.5 The reporting mechanism operates in multiple languages or has capacity to provide immediate access to bring in translators	If yes to 2.1.1, this reporting mechanism operates in multiple languages, or brings in translators as necessary. If no to 2.1.1, indicator not met.  Please refer to the most relevant reporting mechanism identified in 2.1.1 for indicators 2.1.2 through to 2.1.5.  Modern slavery/ trafficking hotline would be most relevant, followed by those which cover sub trafficking populations (e.g. for women and/or children). If multiple hotlines exist covering different populations and all are available in multiple languages, please rate as indicator met. If some hotlines are not available in multiple languages, please rate as indicator not met.  Multiple languages mean national language + at least one other language.
	2.2 Front-line police know what modern slavery is and how to identify victims	2.2.1 Training on basic legal frameworks and victim identification has been carried out for front-line "general duties" police	Training for front-line police has taken place on basic legal frameworks surrounding modern slavery AND victim identification AND training for police has occurred once since 30 June 2012. Definition of training includes formal in person training, as part of broader curriculum on human rights or other training programs, or part of an online training program.  Training can be provided by INGOs with government support (support define as permission, development of the training, or monetary or in kind support). NOT training manuals have been developed by INGOs, NGOs. NOT booklets with indicators of trafficking have been handed out to police. NOT training for immigration, border guards, or labour inspectors.
		NEGATIVE 2.2.4 There is evidence that police officers have not identified victims of modern slavery	If yes to 2.2.1, but police officers have not identified any victims of modern slavery between 1 February 2016 and 30 June 2017.  If no to 2.2.1, indicator not met.  This indicator is specifically asking if police who have received training have identified victims. Mark as "indicator met" where there has been a failure to identify victims post-training for police. If evidence suggests that victims have not been identified, but no training has occurred, please mark as "indicator met". If the body identifying victims is not specified as "police", government can be used as a proxy.
	2.3 First responders know what modern slavery is and how to identify victims	2.3.1 Training on how to identify victims of modern slavery is provided to front-line regulatory bodies likely to be "first responders"	Training covers indicators of modern slavery and how to refer individuals AND training is formal face to face or online modules AND training is provided to one or more of the following: for border guards, immigration officials, labour inspectors AND training has been provided once since 30 June 2012. Training can be provided by INGOs with government support (support defin as permission, development of the training, or monetary or in kind support). NOT leaflets have been distributed to labour inspectors or posters have been put up in airports on how to identify/ report victims.
		2.3.2 Training on how to identify victims of modern slavery is provided to non-regulatory workers likely to be "first responders"	Training covers indicators of modern slavery and how to refer individuals AND training is formal face to face or online modules AND training is provided to one or more of the following: for teachers, docto nurses, social workers, tourism sector (including private tourism operators) AND training has been provided once since 30 June 2012. Training can be provided by INGOs with government support (support define as permission, development of the training, or monetary or in kind support). NOT leaflets have been distributed to tour guides or posters put up in docto surgeries on how to identify/ report victims.

OUTCOME	ACTIVITY	INDICATOR 2017/8	RATING DESCRIPTION
OUTCOME	ACTIVITY	2.3.3 Training for first responders is delivered systematically and at regular intervals (as distinct from one-off, isolated)	If yes to 2.3.1 OR 2.3.2, training is delivered at least every two years to at least one of the above groups (labour inspectors, border guards, immigration doctors, nurses, teachers, social workers) since 30 June 2012  AND training has been delivered to a significant proportion of these groups. OR yes to 2.3.1 AND 2.3.2 and training is delivered at least every two years to BOTH of these groups.  NOT training has been delivered to each of these groups once since 2012 If no to 2.3.1 AND 2.3.2, then indicator not met.
Victims are provided with support to help break the cycle of vulnerability	3.1 Victim determined emergency support is available for all identified victims	3.1.1 Victim support services are available for some suspected victims of modern slavery (men, women and children where relevant)	Any kind of victim support service is available for men, women, or children AND services must be government run, or funded by government, or provide with in-kind support from the government AND services must be operational between 1 February 2016 and 30 June 2017.  NOT INGOs run a shelter without any government support. (Support defined as permission, development of the training, or monetary or in-kind support).
		3.1.2 NEGATIVE Suspected victims are held in shelters against their will and do not have a choice about whether or not to remain in a shelter	If yes to 3.1.1, adult victims are unable to leave a shelter or safe house when they wish (or are unable to leave without a chaperone). Children must also be able to leave when they wish but should be accompanied with a chaperone. If evidence that victims (adults and children) are detained against their will or are unable to leave unaccompanied (adults) or with a chaperone (children), this meets the criteria of the indicator. If no to 3.1.1, not met this indicator.
		3.1.3 Government contributes to the operational costs of the shelters and there are no significant resource gaps	If yes to 3.1.1, government provides support to the shelters. Support defined a in kind or monetary support (not just permission).  NOT INGO funds and runs a shelter or safe house.  If no to 3.1.1, not met indicator.  If government provides some resources, but there are significant gaps not covered by INGOs or government, then please rate as indicator not met.
		3.1.4 Physical and mental health services are provided to victims of modern slavery	If yes to 3.1.1, there is evidence of some physical AND mental health support for victims of modern slavery since 30 June 2012.  If no to 3.1.1., not met indicator.  If government provides some physical and mental health support, but there are significant gaps not covered by INGOs or government, then please rate a indicator not met.
		3.1.5 NEGATIVE Victim support services are not available for all victims of modern slavery	If yes to 3.1.1 AND there have been identified modern slavery cases of men, women, children, (or other relevant groups-foreign victims, forced labour victims, victims of commercial sexual exploitation etc), AND there are NO specific shelters or services for them. This has also occurred between 1 February 2016 and 30 June 2017. NOT services are not available for a particular group, but no cases within that grouwere identified.  This indicator is measuring gaps in existing services.
		3.1.7 NEGATIVE No victims have accessed the services or shelters	If yes to 3.1.1, despite availability of services, victims have not accessed them AND this has occurred between 1 February 2016 and 30 June 2017. Example include cases where facilities exist, but victims are not being transferred to these facilities.  This indicator is measuring the use of existing services.
	3.2 Victim determined longer-term support is available for all identified victims	3.2.1 Services provide long term reintegration support	If yes to 3.1.1, long term reintegration is defined as evidence of financial support, provision of housing, job training and/or placement, or receipt of social welfare, or provision of education for victims of modern slavery AND there is evidence that this has been provided between 1 February 2016 and 30 June 2017. If no to 3.1.1, indicator not met.  NOT visas are available for victims- this is covered under M1 3.2.2.

Milestone 1: S	urvivors of slavery	are identified and sup	ported to exit and remain out of modern slavery
OUTCOME	ACTIVITY	INDICATOR 2017/8	RATING DESCRIPTION
		3.2.2 Measures are in place to address the migration situation of victims who want to remain or be resettled	Visas are available so that foreign victims can receive support either in country or in a third country after a reflection period has expired.  AND These are available between 1 February 2016 and 30 June 2017.  Note: not dependent on 3.1.1.  These visas include cover longer term visas AND reflection periods) awarded on the basis of personal situation OR participation in court case.
		3.2.3 Services are child friendly	If yes to 3.1.1, children have specialised services, separate shelters, or given some kind of special support (NOT including support in the criminal justice system)  AND this has occurred since 30 June 2012.  If no to 3.1.1, indicator not met. NOT children are placed in correctional facilities, boarding schools or other non-specialised institutions.
		3.2.4 Victims are assisted to make contact with their family or contact person of choice	If yes to 3.1.1, victims are assisted to make contact with families by the government OR there is a family reunification program AND this is operating between 1 February 2016 and 30 June 2017. NOT Programs or family reunification program exists but is not currently funded. NOT INGOs operate a family reunification program, without government support. If no to 3.1.1, not met this indicator.
	3.3 Services have been evaluated	3.3.1 Training has been carried out for all staff providing direct assistance services	If yes to 3.1.1, evidence of any training for those who provide direct victim support services.  This training includes how to assist victims of modern slavery, and can include do no harm principles, individualised treatment and care, comprehensive care, self-determination and participation, non-discrimination, confidentiality and right to privacy  OR Direct assistance is provided by fully qualified social workers, psychologists or doctors  AND This has occurred since 30 June 2012.  Training can be provided by INGOs with government support (support defined as permission, development of the training, or monetary or in kind support).  NOT Training is provided by unskilled volunteers.  If no to 3.1.1, not met this indicator.  NOT General modern slavery training is provided to social workers.  Direct assistance services means those services provided to workers who have regular contact with victims post-identification. It can include shelter workers, case managers, doctors and psychologists.
		3.3.2 Direct victim assistance services have been evaluated	If yes to 3.1.1, evidence of formal reporting or evaluation of direct victim support services has been undertaken AND this has occurred once since 30 June 2012. Evaluation (internal or external) is defined as an assessment of the current services against the service objectives and incorporating client feedback. NOT a description of the program or services provided NOT ad hoc inspections without a clear sense of follow up activities. NOT evaluations of the National Action Plan- this is covered under M3 2.1.1.
		3.3.3 Evaluations of services have been provided to the National Referral Mechanism or coordinating referral body	If yes to 3.3.2, a report of these evaluations has been made to the National Referral Mechanism or coordinating referral body to inform future assistance programming AND this has occurred once since 30 June 2012.
Government coordinates the identification and referral of victims	4.1 Identification guidelines are used by all first responders	4.1.1 The government has clear national guidelines for identifying and screening victims for all first responders	National general guidelines exist for identification AND screening of victims AND have been distributed to all first responders AND this has occurred since 30 June 2012. First responders are defined as: immigration, border patrol, labour inspectors, NGOs, teachers, social workers, doctors, nurses, and the tourism industry. General guidelines should exist at the national level for all responders, NOT police have their own guidelines.

ОИТСОМЕ	ACTIVITY	INDICATOR 2017/8	RATING DESCRIPTION
		4.1.2 The guidelines make provision for a category of "presumed victims", who can be provided with services until a formal determination is made.	If yes to 4.1.1, guidelines include provisions so victims who have not yet been assessed to be victims of modern slavery can still receive services. If no to 4.1.1, indicator not met.  Examples include, "presumed" categories within guidelines, or "informal" assistance given to victims while determination is made.
		4.1.3 The guidelines clearly set out which organisations have the authority to identify victims of modern slavery	If yes to 4.1.1, guidelines outline which organisations can or cannot formally identify victims of modern slavery.  If no to 4.1.1, indicator not met.  Examples include a list of approved agencies and NGOs who can identify and certify victims of modern slavery.
	4.2 National Referral Mechanism is operating effectively	4.2.1 A "National Referral Mechanism" brings together government and civil society to ensure victims are being referred to services	There is a National Referral Mechanism for victims of modern slavery AND includes government and non- government organisations AND operating during the period 1 February 2016 and 30 June 2017 A National Referral Mechanism is a group of approved NGOs and government agencies which refers victims to services.  NOT evidence that victims have been referred without a national system in place.
		4.2.2 There is evidence that victims are being referred to services using the National Referral Mechanism	There is evidence that victims are referred through the National Referral Mechanism AND this has happened once between 1 February 2016 and 30 June 2017.

Milestone 2: C	Milestone 2: Criminal justice mechanisms function effectively to prevent modern slavery					
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION			
Legislation deters citizens from committing crime of modern slavery	1.1 Relevant international conventions are ratified	1.1.1 Slavery Convention, 1926	Ratification, or succession (d) or accession (a) of 1926 Slavery Convention. NOT signed the 1926 Slavery Convention, WITHOUT accession, succession or ratification.			
		1.1.2 Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery, 1956	Ratification, succession (d) or accession (a) of the 1956 Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery.  NOT signed the Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery 1956, WITHOUT accession, ratification, or succession.			
		1.1.3 Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime, 2000	Ratification, Acceptance (A), Accession (a), or Succession (d) of the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime, 2000.  NOT signed the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime 2000, WITHOUT Ratification, Acceptance (A), accession (a), or Succession (d).			
		1.1.4 Abolition of Forced Labour Convention ILO, No. 105, 1957	Status must be "In Force" for the Abolition of Forced Labour Convention, No. 105, 1957  AND "In Force" as of 30 June 2017.  NOT "In force" for the Forced Labour Convention (1930).			
		1.1.5 Domestic Workers Convention ILO No. 189, 2011	Status must be "In Force" for the Domestic Workers Convention, No, 189 AND "In Force" as of 30 June 2017.			
		1.1.6 Worst Forms of Child Labour ILO 182, 1999	Status must be "In Force" for the Worst Forms of Child Labour Convention, 1999 (ILO 182) AND "In Force" as of 30 June 2017.			
		1.1.7 Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict, 2000	Ratification, succession (d) or accession (a) of the CRC Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict, 2000.  NOT signed the CRC Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict 2000, WITHOUT accession, ratification, or succession.			
		1.1.8 Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography, 2000	Ratification, succession (d) or accession (a) of the CRC Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography 2000.  NOT signed the CRC Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography 2000, WITHOUT accession, ratification, or succession.			
		1.1.9 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families, 1990	Ratification, succession (d) or accession (a) of the International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families 1990.  NOT signed or signed to succeed the International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families 1990, WITHOUT accession, ratification, or succession.			

LITCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
UTCOME	ACTIVITY	INDICATOR 2018	
		1.1.10 Protocol of 2014 to the Forced Labour Convention, P029, 1930	Status must be "In Force" for the Protocol of 2014 to the Forced Labour Convention, P029, 1930 AND "In Force" as of 30 June 2017
	1.2 Domestic legislation is in line with international conventions	1.2.1 Human trafficking is criminalised	Human Trafficking is listed as a standalone article in the Penal Code or Crimin Code  OR Human Trafficking is criminalised under a distinct piece of legislation  AND Within either the penal code or distinct legislation human trafficking does not require movement of individuals across international borders  AND The legislation covers men, women and children.  Movement may include cross-border/transnational movement, or internal movement such as movement from a rural to urban location.  Definition of trafficking includes action, means, and purpose.  Trafficking in persons shall require action (e.g. recruitment, transportation, transfer, or harbouring), means (e.g. by means of the threat or use of force or other forms of coercion, of abduction, of fraud), and purpose (eg. exploitation)
		1.2.2 Slavery is criminalised	Slavery is criminalised as a distinct crime.  The offence of slavery must include a situation in which the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised. Slavery may be listed as a standalone crime in the Penal or Criminal Code or in trafficking specific legislation or in another act NOT Slavery is prohibited in the Constitution.
		1.2.3 Forced labour is criminalised	Forced labour is criminalised as a distinct crime.  Forced or compulsory labour means all work or service which is exacted from any person under the menace of any penalty and for which the said person in not offered himself voluntarily. Does not include compulsory military service, work which forms part of the normal civic obligations of the citizen, or work performed in cases of emergency (such as war, fire, famine or flood).  The offence of forced labour must include  (1) work performed under the menace of any penalty;  (2) work for which the said person has not offered himself voluntarily.  These two components must be present in order for the indicator to have been made to be a standalone crime in the Penal or Criminal Code or in trafficking specific legislation or in another act.
		1.2.4 Use of children in armed conflict is criminalised	Criminal code or standalone legislation specifically criminalises use of children in armed conflict.  NOT where the age of recruitment is 18, but there is no criminalisation of the use of children in armed forces.  Must cover use of children in state (national army) and armed groups (non-statement groups).
		1.2.5 Child prostitution is criminalised	The penal or criminal code or trafficking legislation includes provisions that it an offence:  AND to buy sexual acts with a child.  NOT met when selling a child is criminalised AND child sex abuse is criminalised (second component must criminalise purchase of sex with a child to sell/force a child into prostitution.

Willestone 2: C	riminai justice me		ectively to prevent modern slavery
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
		1.2.6 Forced marriage is criminalised	Forced marriage is criminalised as a distinct crime, in the penal or criminal code, trafficking legislation or other act  NOT The legal age of marriage is set at 18.  If kidnapping is required to be present for the crime of forced marriage to occur, this is indicator not met.
		1.2.7 NEGATIVE Criminal laws have disproportionate penalties	Penalties as laid out in legislation are cruel or inhumane OR are not sufficient enough to deter future offenders. This does NOT refer to judicial sentences, rather the punishments outlined in legislation. Cruel and inhumane punishments include torture, deliberately degrading punishment, or punishment that is too severe- capital punishment, whipping, other forms of physical violence. Insufficient punishments would include fines for modern slavery related crimes.
Victims are able to access justice	1.4 National laws recognise that victims are able to participate in court process to receive justice	1.4.1 National laws allow victims to participate in the legal system, regardless of their role as a witness	National laws allow victims to participate in the legal system regardless of their role as a witness.  This includes: allowing victims to give evidence (without being called as a witness),  OR providing information on the court processes in languages victims understand,  OR allowing victims to inspect and add documents to the file,  OR and the admission of victim impact statements.  NOT there is evidence or a general statement that victims participate in the criminal justice process as witnesses.  Relevant national laws include Criminal Procedure Code, or Criminal law (sentencing) Acts.
		1.4.2 Law recognizes that victims should not be treated as criminals for conduct that occurred while under control of criminals	National laws recognise victims are not a criminal for conduct during enslavement  AND This must refer to modern slavery crimes, not general provisions in legislation.  Modern slavery crimes are defined as human trafficking, forced labour, slavery forced marriage, and children in armed conflict.  NOT there is no evidence that victims have been criminalised.
		1.4.3 Visas to stay in the country are not dependent on victim participation in the court process	Visas to remain are not tied to participation in the court process. For example, visas are awarded to trafficking victims on the basis of humanitarian or persona reasons, not because they"ve agreed to participate in the court process.
		1.4.5 NEGATIVE There is evidence that victims of modern slavery have been treated as criminals for conduct that occurred while under control of criminals	Victims have been arrested for crimes committed while under the control of the person exploiting them AND This has occurred between 1 February 2016 and 30 June 2017. NOT Foreign nationals have been deported OR detained for immigration offences (no visa, overstaying visa etc). This is covered under milestone 3, 3.2.2 Examples would be victims have been arrested on prostitution charges or arrested for drug production. If victims are arrested and released as soon as it is realised that they are victims, please rate as indicator not met.

Milestone 2: C	riminal justice me	chanisms function effe	ectively to prevent modern slavery
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
	2.1 Services exist to allow victims to access justice	2.1.1 Free legal services for victims of modern slavery are made explicit in legislation	Any kind of free legal services or advice exists in legislation, including free legal advice, and free legal representation  AND these are either specific to victims of modern slavery  OR victims of modern slavery can access broader legal advice, which is available for all victims of crime.  NOT Legal services are available, but not free.  NOT Free legal services are only available for citizens, not foreign victims.  NOT Free legal services are available for certain types of crime (such as violent crime) and modern slavery is not specified.  NOT Free legal services are offered by NGOs, but not made explicit in legislation.  If free legal services exist in legislation AND there is no evidence they are not being used, please rate as indicator met.  If free legal services exist in practice, but there is no evidence of their existence in legislation, please rate as indicator met.  If free legal services are NOT in legislation and no evidence of these being used, please rate as indicator not met.  If free legal services exist in legislation and there is evidence they are not used or are poorly implemented, please rate as indicator not met.
		2.1.3 Witness and victim protection mechanisms are explicit in legislation to ensure that neither witnesses nor victims are intimidated, nor interfered with INSIDE the court	Government operated or supported witness and victim protection mechanisms exist in legislation so that victims are not intimidated or interfered with INSIDE the court.  Government operated or supported is defined as government run, or funded by government, or provided with in-kind support from the government.  NOT applicable outside the courtroom, see M2, indicator 2.1.4.  Victim protection mechanisms inside the courtroom refers to provision of video testimony, victims are not cross- examined, and victims are protected from perpetrators.  If witness protection mechanisms exist in legislation AND there is no evidence they are not being used, please rate as indicator met.  If witness protection mechanisms exist in practice, but there is no evidence of their existence in legislation, please rate as indicator met.  If witness protection mechanisms are NOT in legislation and no evidence of these being used, please rate as indicator not met.  If witness protection mechanisms exist in legislation and there is evidence they are not used or are poorly implemented, please rate as indicator not met.

			ectively to prevent modern slavery
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
		2.1.4 Witness and victim protection mechanisms are explicit in legislation to ensure that neither witnesses nor victims are intimidated, nor interfered with OUTSIDE the court	Government operated or supported witness and victim protection mechanisms exist in legislation so that victims are not intimidated or interfered with OUTSIDE the court.  Government operated or supported is defined as government run, or funded by government, or provided with in-kind support from the government.  NOT applicable inside the courtroom, see milestone 2, indicator 2.1.3.  Witness and victim protection mechanisms include an official witness protection program where individuals are provided with security, new identities, and relocation support, or protection where the victim"s identity is not revealed to the public.  If witness protection mechanisms exist in legislation AND there is no evidence they are not being used, please rate as indicator met.  If witness protection mechanisms exist in practice, but there is no evidence of their existence in legislation, please rate as indicator met.  If witness protection mechanisms are NOT in legislation and no evidence of these being used, please rate as indicator not met.  If witness protection mechanisms exist in legislation and there is evidence they are not used or are poorly implemented, please rate as indicator not met.
		2.1.5 The legal framework supports restitution or compensation for victims of modern slavery	The legal framework allows victims of modern slavery to receive compensation for damages incurred as a result of exploitation  OR the legal framework allows victims of modern slavery to receive restitution for damages incurred as a result of exploitation.  Compensation is when a court orders the defendant (perpetrator) to pay the claimant (victim) for his/her loss.  Restitution is when a court orders the defendant (perpetrator) to give up his/her gains to the claimant (victim).  When the compensation and/ or restitution is available only for victims of violent crimes, please mark as indicator not met- this may exclude some victim of modern slavery who are not subject to violent crimes.  If compensation and/ or restitution exists in legislation AND there is no evidence they are not being used, please rate as indicator met.  If compensation and/or restitution exists in practice, but there is no evidence of their existence in legislation, please rate as indicator met.  If compensation and/or restitutios is NOT in legislation and no evidence of these being used, please rate as indicator not met.  If compensation and/or restitution exists in legislation and there is evidence they are not used or are poorly implemented, please rate as indicator not met.

Milestone 2: C	Criminal justice me	echanisms function effe	ectively to prevent modern slavery
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
		2.1.6 Child friendly services are provided for in legislation	Legislation specifies that children require special services during the court case.  NOT there is any evidence of child friendly services being used in court.  Child friendly services include the use of screens or video testimonies, training of judges in child friendly questioning, and the use of one support person or guardian during the court process.  If child friendly services exist in legislation AND there is no evidence they are not being used, please rate as indicator met.  If child friendly services exist in practice, but there is no evidence of their existence in legislation, please rate as indicator met.  If child friendly services are NOT in legislation and no evidence of these being used, please rate as indicator not met.  If child friendly services exist in legislation and there is evidence they are not used or are poorly implemented, please rate as indicator not met.
	3.1 Specialised police units are able to investigate modern	3.1.1 Specialised law enforcement units exist	Has to be a specialised law enforcement unit or a sub-unit or team within the law enforcement structure that has specialised mandate to conduct investigations into modern slavery, OR provide specialist support for colleagues AND this unit is operating since 30 June 2012. NOT Local level anti trafficking coordination bodies.
	slavery crimes	3.1.3 NEGATIVE Units do not have necessary resources to be able to operate effectively	If yes to 3.1.1, these units, sub-units, or teams do not have sufficient budget, or operational equipment, or are understaffed. This has an impact on their ability to function. This lack of resources must have occurred between 1 February 2016 and 30 June 2017.
		3.1.4 Units have Standard Operating Procedures for modern slavery cases	If yes to 3.1.1, the unit or team has standard operating procedures for modern slavery cases  AND must be specific to specialist units.  NOT SOPs/ guidelines have been produced by an INGO in the last 5 years (since 30 June 2012) with no evidence of use by specialist unit.  SOPs include, for example: clear standardised procedures for use across the unit, including how to liaise with front line officers, on how to conduct risk assessments, interview techniques (covering witnesses, child victims and use of interpreters), definitions and indicators of modern slavery, victim centred approaches (understanding of psychological stress and its impact on investigations), case referrals etc.  SOPs are NOT an internal memo recommending that police focus on modern slavery cases.  SOPs are NOT a booklet handed out to police with indicators of modern slavery.
	3.2 Increased number of quality prosecutions	3.2.1 Training is provided to the judiciary	Training for the judiciary has taken place on human trafficking and related legislation, victim needs in the courtroom, basic international legal standards in modern slavery cases, trends in modern slavery in the country, and victim profiles  AND training for judiciary has occurred once since 30 June 2012.  Definition of training includes formal in person training, as part of broader curriculum on human rights or other training programs, or part of an online training program.  Training can be provided by INGOs with government support (support defined as permission, development of the training, or monetary or in kind support).  NOT training manuals have been developed by INGOs, NGOs.  NOT booklets with description of modern slavery laws have been handed out to judiciary.

Milestone 2: C	Milestone 2: Criminal justice mechanisms function effectively to prevent modern slavery			
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION	
		3.2.2 Training is provided to prosecutors	Training for prosecutors has taken place on human trafficking and related legislation, victim needs in the courtroom, basic international legal standards in modern slavery cases, trends in modern slavery in the country, and victim profiles  AND training for prosecutors has occurred once since 30 June 2012.  Definition of training includes formal in person training, as part of broader curriculum on human rights or other training programs, or part of an online training program.  Training can be provided by INGOs with government support (support defined as permission, development of the training, or monetary or in kind support).  NOT training manuals have been developed by INGOs, NGOs.  NOT booklets with description of modern slavery laws have been handed out to prosecutors.	
		3.2.4 Training is systematic and recurrent (as distinct from one- off, isolated)	If yes to 3.2.1, 3.2.2, OR 3.2.2, training is has occurred at least once to at least one of the above groups (judiciary or prosecutors) since 30 June 2012  AND training has been delivered to a significant proportion of these groups  OR yes to 3.2.1, 3.2.2, OR 3.2.3 and training has been delivered at least once to  BOTH groups (judges, prosecutors) since 30 June 2012.  NOT training has been delivered to each of these groups once since 2012.  If no to 3.2.1, AND 3.2.2, then indicator not met.	
		3.2.5 NEGATIVE Judicial punishments are NOT proportionate to severity of the crime and culpability of the offender.	Judicial punishments are either too lenient or too harsh for offenders AND this has occurred during the period 1 February 2016 to 30 June 2017. Examples of too lenient include giving of fines, suspended sentences, and sentences are less than the prescribed minimum. Examples of too harsh are corporal punishment and capital punishment.	

Milestone 3: C	Milestone 3: Coordination occurs at the national and regional level, and governments are held to account for their response				
OUTCOME	ACTIVITY	INDICATORS 2018	RATING DESCRIPTION		
Responses to modern slavery are coordinated	1.1 National mechanisms exist to coordinate the response	1.1.1 National coordination body exists involving both government and NGOs	National coordination body on modern slavery (trafficking, slavery, forced labour, children in armed conflict) exists that includes both NGOs and government representatives  AND this group met at least once between 1 February 2016 and 30 June 2017. This body coordinates the whole of the government response to modern slavery.  NOT a National Action Plan.  NOT a group or body that refers victims. This is covered under Milestone 1, 4.2.1.		
		1.2.1 National Action Plan exists with clear indicators and allocation of responsibilities	Any National Action Plan (NAP) on modern slavery, or that covers any component of modern slavery, such as trafficking, forced marriage, forced marriage, children in armed conflict  AND this NAP covers part or all of the period 1 February 2016 to 30 June 2017.  NOT Child labour NAPs, or broader human rights NAPs, women empowerment NAPs, unless they include a specific modern slavery section.  NOT Regional action plans, such as the Regional Action Plan to End Child Marriage in South Asia (developed with SAARC countries).		
		1.3.2 Government routinely uses the National Action Plan as a framework for reporting its actions	If yes to 1.2.1, the government releases annual reports against the National Action Plan, including process reviews of major anti-slavery initiatives, budgets/expenditure and implementation plans for the following year/s. If no to 1.2.1, then this indicator cannot be met.		
		1.3.5 Activities in the National Action Plan are fully funded	If yes to 1.2.1, there is evidence that there is a budget attached to the NAP and this is fully funded.  Still indicator met if the NAP is part funded by government and part funded by IOs or NGOs, but that all activities are funded.  NOT The activities are costed, but it is unclear where this money is coming from OR there are reports of significant gaps in funding which is not plugged by IOs, NGOs or other agencies.  If no to 1.2.1, then this indicator cannot be met.		
	2.1 Independent mechanisms exist to monitor the response	2.1.1 Independent entity to monitor the implementation and effectiveness of National Action Plan exists	An independent entity is established to monitor the activities of the government in relation to their anti- modern slavery efforts.  This body can be outside the NAP and does not have to only focus solely on modern slavery.  Independent entity can be an independent statutory body or individual or other third party, that DOES NOT implement the government response to modern slavery. Examples would include a Human Rights Commission or National Rapporteur.  NOT regional entities that inspect government responses, such as GRETA in Europe		

Milestone 3: C	Coordination occur	s at the national and re	egional level, and governments are held to account for their response
OUTCOME	ACTIVITY	INDICATORS 2018	RATING DESCRIPTION
	3.1 General cross border collaboration exists	3.1.1 The government is involved in a regional response	The government is part of a regional response.  A relevant regional body includes:  A body with more than two country representatives as members of the group;  AND  A focus on some form of modern slavery.  The government must have signed onto, or have agreed to abide by the shared values, and objectives developed by the group (i.e. a code of conduct, an MoU on proposed outcomes etc.)
		3.1.3 Agreements exist between the government and countries of origin and/ or destination to collaborate on modern slavery issues	Agreements exist between governments of countries of origin and/ or destination on modern slavery issues to collaborate on modern slavery issues NOT labour migration agreements- covered under M3 3.2.6 NOT evidence of repatriation- covered under M3 3.2.1.
	3.2 Cross border collaboration exists, specific to foreign victims of modern slavery	3.2.1 The government cooperates with the government of the home country to facilitate repatriation	The government cooperates with home country for voluntary repatriation of foreign nationals.  This could include repatriation mediated by IOM (MUST have evidence that police or government authorities refer victims to IOM).  AND This has occurred since 30 June 2012  NOT Evidence of deportation.  Repatriation refers to the voluntary return of individuals to their home country with their consent.  Deportation refers to the removal of an individual from a country without their consent.
		NEGATIVE 3.2.4 Foreign victims are detained and/ or deported for immigration violations	Foreign victims are detained in detention facilities or deported for immigration violations. Can include instances where victims are detained for a breach of visa conditions OR instances foreign victims are deported to countries of origin without access to assistance.  This occurred between 1 February 2016 and 30 June 2017.  Note: if victims are arrested for crimes committed while enslaved, please refer to Milestone 2, 1.4.2.
		3.2.6 Agreements exist between countries on labour migration, which provide protection for labour migrants	These agreements provide protection for labour migrants, NOT agreements regarding number of labour migrants sent/ received. For countries that are part of the EU, membership is not sufficient to offer protection. Instead, please see national legislation has been harmonised with EU requirements under EU law-See GRETA reports.

OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
Government programming reflects and responds to known risk factors and drivers of modern slavery and patterns of exploitation	1.1. Risk factors, drivers, and patterns of exploitation are understood and inform government action	1.1.1 Government facilitates or funds non- prevalence research on modern slavery	Government funds or has been actively involved in research on any type of modern slavery, including responses to modern slavery, and the attitudes, social systems and institutions that place people at risk of modern slavery AND this has occurred at least once since 30 June 2012.  Active involvement is defined as development of the research, participation in the research, or monetary or in kind support.  Modern slavery includes trafficking, forced labour, slavery, worst forms of child labour, forced marriage and use of child soldiers.  NOT civil society conducts research without government involvement.  NOT government conducts prevalence research.
		1.1.2 Government facilitates or funds research prevalence or estimation studies of modern slavery	The government funds or has been actively involved in prevalence or estimation studies of modern slavery.  AND this has occurred at least once since 30 June 2012.  Active involvement is defined as development of the research, participation in the research, or monetary or in kind support.  Modern slavery includes trafficking, forced labour, slavery, worst forms of child labour, forced marriage and use of child soldiers.  The research must provide estimations of the number of people in modern slavery.  NOT civil society conducts research without government involvement.
		1.1.3 Government interventions that aim to address modern slavery are evidence-based.	There is evidence that government interventions or programs are based on strategies or theories of change identified by research AND this has occurred since 30 June 2012. Evidence can include a broader government strategy which incorporates modern slavery research, the National Action Plan incorporates modern slavery research or that the National Action Plan or strategy is reviewed in line with recent modern slavery research.
	1.2 Government interventions are tailored to risks	1.2.1 Awareness campaigns target specific known risks of modern slavery	Any awareness campaign implemented by the government, which provides detailed information on how to avoid the risks of modern slavery AND has run at least once since 30 June 2012.  Campaign can be implemented by the government with a partner NGO OR funded by the government and implemented by an NGO.  These campaigns can include domestic violence, forced marriage, child marriage, the worst forms of child labour, child soldiers, and risky migration practices.  NOT an awareness raising counter trafficking campaign run by an international organisation.  NOT Promotion of the hotline- this is covered under milestone 1, 1.1.1.

Milestone 4: Ri	sk factors, such a	s attitudes, social syste	ems and institutions, that enable modern slavery are addressed
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
Vulnerable populations do not become enslaved	1.3 Safety nets exist for vulnerable populations	1.3.2 The government conducts labour inspections in the informal sector to identify cases of modern slavery	The government funds labour inspections which are conducted with specific intent of finding modern slavery victims in the informal sector.  Government funding is defined as monetary or in-kind support.  Informal sector includes workers in un-regulated industries. i.e. sex work, brick kilns, agriculture, fishing, and domestic work.  AND these inspections have occurred since 30 June 2012.  NOT private companies or corporates conduct their own inspections.  NOT labour inspectors are trained on modern slavery. This is covered under M1 2.3.1.
		1.3.3 Affordable health care for vulnerable populations exists	Affordable health care includes the presence of state health care schemes, community health schemes, or financial assistance focused on providing access to health care for vulnerable groups.  Health care is available for all and does not discriminate based on gender, ethnicity, religious background or geographic region.  NOT Health care is available for victims of modern slavery- this is covered under M1 3.1.4.  For example, health care is too costly, thereby excluding certain groups or health care is too centralised, thereby excluding certain geographical regions, please rate as indicator not met.
		1.3.4 Public primary education is available for all children regardless of ethno-cultural or religious background	Public primary education system exists.  Education is available for all children and does not discriminate based on gender, ethnicity, religious background or geographic region.  For example, primary education is too costly, thereby excluding attendance by certain groups of children, or education is not available to Roma groups, please rate as indicator not met.
	1.4 Official complicity is illegal	1.4.1 National laws criminalise corruption in the public sector	Public corruption is criminalised in legalisation.  Public sector includes government officials, including police, immigration, and border guards. Corruption includes, at a minimum, bribery of officials. Please refer to legislation, not to instances of combatting corruption.
	1.4 NEGATIVE Official complicity is not investigated	1.4.3 NEGATIVE Reports of individual officials" complicity in modern slavery cases have not been investigated	Any reports of individual officials" complicity or corruption in modern slavery cases between 1 February 2016 to 30 June 2017. Individual officials include: government officials, police, immigration officials, border guards, and labour inspectors. Excludes consular staff (covered by milestone 4, indicator 1.7.5) MUST be related to modern slavery crimes (trafficking, forced labour, slavery, forced marriage, use of child soldiers, and worst forms of child labour). NOT Evidence of general corruption of law enforcement. Must refer to more than one report of complicity within the reporting period AND no steps have been taken to investigate these reports. <sup>82</sup>

Milestone 4: R	isk factors, such a	s attitudes, social syste	ems and institutions, that enable modern slavery are addressed
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
	1.5 Social protections exist	1.5.1 Birth registration systems exist	The government funds or supports birth registration systems that covers the entire population.  Can include systems which are implemented or funded by INGOs, but with government support.  Government support is defined as development of the birth registration system, participation in the system, or monetary or in kind support.  Covering the entire population refers to the percent of people who are registered. Award indicator not met if less than 95 percent of the population is registered OR specific groups are missing. See UNICEF statistics and supplement with additional research on missing vulnerable populations.  Vulnerable populations can include ethnic, cultural or religious groups who do not have equal access to birth registration. E.g. Roma populations.
		1.5.2 Systems are in place to allow asylum seekers to seek protection	There are policies and procedures in place so that asylum seekers are able to access basic support and protection within a country"s borders  Services may be provided by IOs/NGOs with government support  Government support is defined as development of the asylum seeker system, participation in the system, or monetary or in kind support.  NOT  Asylum seekers are detained without access to services  NOT  Asylum seekers are deported without their claims being assessed  NOT  Asylum seekers claims are assessed outside of the country where they sought asylum.
	1.6 Safety nets exist for migrant workers	1.6.3 Laws or policies state that private recruitment fees are paid by the employer, not the employee	Government legislation or policies state that recruitment fees payable to recruitment agencies are not charged to the employee (i.e. are paid by the employer, not employee). Please check Labour Code or Employment Act for this information.
		1.6.5 Labour laws extend to everyone, including migrant workers, domestic workers and those in the fishing and construction sectors.	The legal definition of an employee includes all vulnerable workers, such as domestic workers, migrant workers, construction workers, maritime workers, etc. If the jurisdiction does not have a generic definition of an employee, or a labour code, the information can come from NGOs, related legislation or reports. NOT Domestic workers are not explicitly mentioned in legislation. NOT Labour protections do not cover fishermen in territorial waters. This indicator does not extend to army, judiciary and civil service- if these are NOT included, and all other groups are included, this is still indicator met.
		1.6.7 NEGATIVE Patterns of abuse of labour migrants are institutionalised, or systematic and unchecked	Abuse of migrant workers is institutionalised, or systematic and not addressed. Institutionalised means that these practices are part of government policy, or that these patterns of abuse are systematic, and the government is taking little if any action to address this.  Patterns of abuse includes multiple instances of the following: high recruitment fees, or high interest rates on fees, makes it impossible to pay these fees back, or withheld passports is a common occurrence by the majority of employers, or most workers have restrictions placed on their movement by their employers AND this occurred between 1 February 2016 and 30 June 2017.  NOT instances of these abuses are reported, but the government is taking action against these.
		1.6.9 NEGATIVE There are laws or policies that prevent or make it difficult for workers to leave abusive employers without risk of loss of visa and deportation	Any current specific government policy or law that leads to loss of visa or deportation of migrant workers (or specific groups of migrant workers, such as domestic workers) for leaving abusive employers.  AND current defined as operating between 1 February 2016 and 30 June 2017. NOT there is evidence of victims being deported for breach of visa conditions, but this does not occur as a direct result of government policy. This is covered under milestone 3, indicator 3.2.4.

Milestone 4: R	isk factors, such a	s attitudes, social syste	ems and institutions, that enable modern slavery are addressed
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
	1.7 Government provides support for citizens overseas	1.7.1 Government provides training for its consular staff on modern slavery	Governments provide training for its embassy or consular staff before departure for a posting or during a posting.  AND This has occurred once since 1 February 2012.  Definition of training includes formal in person training, as part of broader curriculum on human rights or other training programs, or part of an online training program.  Training can be provided by INGOs with government support (support defined as permission, development of the training, or monetary or in kind support).  NOT training manuals have been developed by INGOs, NGOs.  NOT booklets with indicators of trafficking have been handed out to Embassy staff.
		1.7.2 Government provides identification documents and support travel arrangements for citizen return	Any citizen found to be exploited overseas can obtain documents from their own country or be facilitated with travel back to their country by their own government. These documents are normally given by a citizen"s Embassies or Consulates  AND this has occurred at least once since 30 June 2012.  This information can be found in modern slavery legislation, or on Ministry/ Department of Foreign Affairs websites.
		1.7.5 NEGATIVE Diplomatic staff are not investigated for alleged complicity in modern slavery cases or abuse of victims	Diplomatic/Embassy staff are complicit in the exploitation of nationals or abuse those who seek assistance at the Embassy and no investigations have taken place AND this has occurred between 1 February 2016 and 30 June 2017.
	1.8 NEGATIVE Government places its population, or part of its population in forced labour	1.8.1 NEGATIVE State sanctioned forced labour exists	Any form of state sanctioned labour, where the government forced the whole, or segments of the population, to work under threat of penalty, and for which work, the person or population has not offered himself voluntarily. Excludes compulsory military services, work which forms part of normal civil obligations of the citizen, or work performed in cases of emergency (such as war, fire, famine or flood). <sup>83</sup>

Milestone 5: G	overnment and b	usiness stop sourcing g	oods and services produced by forced labour
OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
Government sources goods and services which are	1.1 Government regulates and investigates public procurement to prevent use of forced labour	1.1.1 Guidelines exist for public procurement officials	The government has drafted guidelines or an internal memo for public procurement officials that outline standards and/ or operating procedures to prevent use of modern slavery in the purchase of public goods or services. These guidelines can include general guidelines on human rights, which include sub sections on modern slavery.
slavery free and encourages businesses to practice due diligence		1.1.2 Public procurement policies and systems exist to minimise the risk of governments purchasing products tainted by forced labour	The Government drafts and implements public procurement policies that outline standards for public procurement, which explicitly prohibit using businesses suspected of using forced labour or purchasing products that were made using forced labour.  These policies can include inserting clauses in public contracts prohibiting the use of forced labour, not making purchasing decisions on price alone, steps to be taken should a contractor be found to use forced labour, or requiring government contractors over a certain value to maintain compliance plans.
		1.1.3 Annual reports on government action to prevent use of forced labour in public procurement are produced and publicly available	The government releases reports on activities taken to prevent use of forced labour in public procurement  AND this has to have occurred since 30 June 2012.  OR if the policy has been adopted in the last two years (since 1 February 2015), it is enough that reporting is stipulated as part of regulating compliance.  The report can also be on human rights but include a sub section on modern slavery.
		1.1.4 The government has provided training to public procurement officials on modern slavery	The government has provided training to procurement officials on what is modern slavery, how it is relevant to their role, existing government policies and their implementation.  This training is provided face to face, or through online training modules, and has occurred at least once since 30 June 2012.
		1.1.5 There is evidence that the government has taken remedial action where forced labour has been discovered	There is evidence that the government has worked with contractors to implement corrective action plans who have identified issues with the use of forced labour.  OR where the use of forced labour is prevalent and the contractor is unwilling to work with the government, there is evidence that the government has cancelled the contract.  AND this has occurred since 30 June 2012.
	2.1 Government encourages business to practice due diligence	2.1.1 Laws or policies require businesses to report on their actions to implement risk minimisation policies	Legislation or policies require business to report on their actions to minimise risk of forced labour in their supply chain. E.g. The UK Modern Slavery Act requires businesses earning over £36 million GBP pa to report on their actions to combat modern slavery.
		2.1.2 Governments have identified high-risk sectors and taken action to work with these sectors to eradicate modern slavery	The government has collaborated with businesses to identify high-risk sectors and set up national sector specific initiatives that support businesses in a particular sector to tackle modern slavery. These initiatives can be broader initiatives that cover off sustainability, health and safety etc, but must include some elements of tackling modern slavery.  For example, the sustainable textile partnership in Germany.
		2.1.3 Laws or policies allow governments to create a public list of businesses who have been found to tolerate slavery in their supply chains	The government has worked with business and NGOs to create a public list of businesses which have been found to tolerate forced labour in their supply chains AND/OR these businesses are prevented from accessing public funds. For example, the "Dirty List" in Brazil.

OUTCOME	ACTIVITY	INDICATOR 2018	RATING DESCRIPTION
		2.1.4 Governments implement a responsible investment reporting requirement for investment funds and banks head-quartered in their country to ensure that investment does not support modern slavery	Investment funds and banks head quartered the country have to report on modern slavery risk in investments AND Reporting must occur at least every two years. If policy is in place, there MUST be evidence that this has occurred since 30 June 2012 OR If the policy has just been adopted, it is enough that reporting is stipulated as part of regulating compliance. NOTE: There must be explicit mention of modern slavery NOT Investment funds or banks have corporate social responsibility policies that require them to report on human rights UNLESS modern slavey forms part of this reporting.
		2.1.5 Laws or policies prevent the import of goods and services made with forced labour	The government has prohibited the import of goods and services made with forced labour. For example, the US Tariff Act.
	criminal offence for Company Director or companies who fail to prevent modern slavery ar failed to undertake reasonable due	place that make it a criminal offence for Company Directors or companies who fail to prevent modern slavery and failed to undertake reasonable due diligence in first tier	Directors can be charged and prosecuted for slavery in first tier supply chains where it can be shown that due diligence has not occurred. This indicator measures the existence of this provision in legislation.



Children in a village collecting grains. Kaesong, North Korea, 2012. Citizens in North Korea start communal services from either elementary, middle or high school. School children are mobilised for mandatory work through their schools.

Photo credit: Eric Lafforgue/Art in All of Us via Getty Images

## MILESTONE 4, INDICATOR M4 1.8.1 "STATE-IMPOSED FORCED LABOUR"

For the 2018 Global Slavery Index, we reviewed the indicator within the government response conceptual framework covering state-imposed forced labour (M4 1.8.1). This was for several reasons. First, the data collected in 2016 tended to cover reported instances of state-imposed forced labour, but did not review the legislative gaps that allow state-imposed forced labour to occur. Secondly, the release of the state-imposed forced labour estimate in the Global Estimates suggested that the prevalence of state-imposed forced labour was perhaps higher than previously thought. And finally, in producing the Global Estimates, the ILO developed a typology of state-imposed forced labour that can be applied systematically to all countries. This was adopted in the Global Slavery Index.

We reviewed the ILO's typology against the available data in the relevant Committee of Experts comments and observations released by ILO. Once a country has ratified an ILO Convention, it is obliged to report regularly on measures it has taken to implement it. The Committee of Experts then reviews these reports as impartial and technical experts and provides an evaluation of the state of application of international labour standards. The Committee of Experts then releases two types of statements: observations and direct requests. Observations provide comments on fundamental questions raised by the application of a particular convention by a state while direct requests relate to more technical questions or requests for additional information. Both observations and direct requests are available online. Each year, the ILO Conference discusses and adopts the Conference Committee's report in its plenary.<sup>85</sup>

The typology developed by the ILO prior to the release of the Global Estimates of Modern Slavery covers six types of state-imposed forced labour:

- » Abuse of conscription, when conscripts are forced to work for tasks which are not of purely military character.
- » Obligation to perform work beyond normal civic obligations.
- » Abuse of the obligation to participate in minor communal services, when these services are not in the direct interest of the community and have not benefited from prior consultation of the members of the said community.
- » Prison labour:
  - » Compulsory prison labour of prisoners in remand or in administrative detention.
  - » Compulsory prison labour exacted for the benefit of private individuals, companies, or associations outside the exceptions allowed by the ILO supervisory bodies.
  - » Compulsory prison labour exacted from persons under certain circumstances, such as punishment for expressing political views, labour discipline, or peaceful participation in strikes.
- » Compulsory labour for the purpose of economic development.
- » Forced recruitment of children by governments.86

The team conducted a search of the ILO NORMLEX database, which houses all observations and direct requests from the ILO Committee of Experts, <sup>87</sup> and extracted the most up to date observation and direct request <sup>88</sup> for both C105 the Abolition of Forced Labour Convention, 1957 and C029 the Forced Labour Convention, 1930. These observations and direct requests, once housed in the government response database, were then reviewed to identify gaps in legislation that have facilitated state-imposed forced labour in line with the above typology. These countries were reviewed twice to ensure accuracy.

Once we had a final list of countries for which we identified relevant gaps in legislation, we then conducted additional research<sup>89</sup> to find evidence that state-imposed forced labour had occurred in practice in the previous two years. The two types of information (Committee of Experts observations and direct requests as well as secondary supplementary evidence of occurrence in practice) were viewed together to make a judgement on whether there was evidence of state-imposed forced labour in line with the following rating rules:

- » Where there was evidence of gaps in legislation, but NO evidence found in practice, countries were rated as 0 no evidence of state-imposed forced labour was found.
- » Where there was evidence of gaps in legislation AND that state-imposed forced labour had occurred in recent years, countries were rated as -1 evidence of state-imposed forced labour was found.
- » Where there was evidence of state-imposed forced labour but there were NO evidence of gaps in legislation, this was rated as -1 evidence of state-imposed forced labour was found.

The third option occurred when countries had not ratified the relevant conventions, and so were not subject to ILO Committee of Experts monitoring and reporting. For countries that fell under the third category, alternative independent sources were used to verify the existence of state-imposed forced labour. Any countries for which the rating was unclear were referred to an independent party for review.

## **APPENDIX 3:**

#### Methodology for identifying risk of modern slavery in products imported by the G20

### Objective

This project aims to provide a high-level indication of how the world's most developed countries are connected to modern slavery not only through exploitation occurring within their own borders but also through the goods they import. Our focus is the G20 countries as they rank among the largest importers (and exporters) in the world, accounting for three-quarters of global trade and taking 80 percent of developing country exports.<sup>90</sup>

Accordingly, as a first step we developed a list of products at-risk of modern slavery. We then compiled import data for all G20 countries targeting the products and source countries that were identified to be at risk of modern slavery. The bibliography of the research on products with risk of modern slavery is included in this appendix.

## Identifying a list of products at risk of modern slavery

#### **Initial list**

Our starting point was the 2016 US Department of Labor list of goods produced by forced labour and child labour. <sup>91</sup> The list was first filtered by "forced labour" to ensure that products suspected of being produced only by child labour were excluded. A simple country count of products was performed to determine a ranking: the product with the highest number of countries listed against it was ranked first, the product with the second highest numbers of countries against it was ranked second, and so on. The top 15 products were then chosen from this list to produce an initial list of product/source country combinations at risk of modern slavery (see Table 1).

TABLE 1
Initial list of goods at risk of being produced by modern slavery

Ranking	Product at risk of modern slavery	Source countries
1	Cotton	Benin, Burkina Faso, China, Kazakhstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan
2	Bricks	Afghanistan, China, India, Myanmar, Nepal, Korea, Democratic People's Republic of (North Korea), Pakistan
3	Garments (Apparel and clothing accessories)	Argentina, Brazil, China, India, Malaysia, Thailand, Vietnam
4	Cattle	Bolivia, Brazil, Niger, Paraguay, South Sudan
5	Sugarcane	Bolivia, Brazil, Dominican Republic, Myanmar, Pakistan
6	Gold	Burkina Faso, Democratic Republic of the Congo, Korea, Democratic People's Republic of (North Korea), Peru
7	Carpets	India, Nepal, Pakistan
8	Coal	China, Korea, Democratic People's Republic of (North Korea), Pakistan
9	Fish	Ghana, Indonesia, Thailand
10	Rice	India, Mali, Myanmar
11	Timber	Brazil, Korea, Democratic People's Republic of (North Korea), Peru
12	Brazil nuts/chestnuts	Bolivia, Peru
13	Cocoa	Côte d'Ivoire, Nigeria
14	Diamonds	Angola, Sierra Leone
15	Electronics (Laptops, computers, and mobile phones)	China, Malaysia

#### Literature review

As a next step, a literature review of this list of product/source country combinations was conducted to independently validate this list, using the following parameters:

- » Reference period: published between 1 January 2012 to 1 March 2018.
- » Mix of media and non-media sources (peer reviewed journal articles, research reports, government documents, international oganisation reports, NGO reports, etc.), whenever possible.

There was a hierarchy of sources that was used in conducting this research (see list below). It should be noted that this list is not exhaustive, and we performed additional searches where suggested sources did not provide sufficient information.

#### Hierarchy of sources:

- 1/ Peer reviewed publications, e.g. articles from scientific journals identified through database searches and, if required, through Google Scholar.
- 2/ Reports of international organisations, e.g. ILO, IOM, UN.
- 3 / Reports of international NGOs, e.g. Human Rights Watch, Amnesty International.
- 4/ Government websites, e.g. Ministry of Foreign Affairs.
- 5 / National NGOs
- 6 / Media, through Google searches.

# Inclusion criteria of product/source country combinations on basis of literature review

Once the literature review was completed, a product/ source country combination was included if it was EITHER on the 2016 Department of Labor list of goods produced by forced labour OR had been identified as at risk through research conducted by the Walk Free Foundation (in the case of fishing and cocoa). In addition, at least one of the following criteria had to be met:

- » A journal article identifies modern slavery in the product sector/source country.
- » A primary research report (qualitative or quantitative) confirms modern slavery in the product sector/ source country.
- » A report from an international organisation identifies modern slavery in the product sector/source country.
- » Cases of modern slavery were reported in the product sector/source country either through NGO or media reports and these reports were based on eye witness accounts or interviews with victims.

If no relevant references were found, the product/source country combination was excluded.

## Final list of products at risk of modern slavery

The literature review resulted in the following final list. The results of our research are written up in Section 4 of this

Appendix. Source countries marked in red were deleted from the list. The countries marked in green were added to the final list on the basis of the Walk Free Foundation's research on modern slavery in the fishing and cocoa industry (see Table 2).

TABLE 2
Final list of products at risk of modern slavery by source country

Product	"Source Countries"
Cotton	Benin, Burkina Faso, China, Kazakhstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan
Bricks	Afghanistan, China, India, Myanmar, Nepal, Korea, Democratic People's Republic of (North Korea), Pakistan
Garments (Apparel and clothing accessories)	Argentina, Brazil, China, India, Malaysia, Thailand, Vietnam
Cattle	Bolivia, Brazil, Niger, Paraguay, South Sudan
Sugarcane	Bolivia, Brazil, Dominican Republic, Myanmar, Pakistan
Gold	Burkina Faso, Democratic Republic of the Congo, Korea, Democratic People's Republic of (North Korea), Peru
Carpets	India, Nepal, Pakistan
Coal	China, Korea, Democratic People's Republic of (North Korea), Pakistan
Fish	China, Ghana, Indonesia, Japan, Russia, Korea, Republic of (South Korea), Taiwan, Thailand
Rice	India, <mark>Mal</mark> i, Myanmar
Timber	Brazil, Korea, Democratic People's Republic of (North Korea), Peru
Brazil nuts/chestnuts	Bolivia, Peru
Cocoa	Côte d'Ivoire, Nigeria, Ghana
Diamonds	Angola, Sierra Leone
Electronics (Laptops, computers and mobile phones)	China, Malaysia

## Import data

### Country list: G20 countries

Trade data were obtained for 18 of the total number of the G20 member countries. South Africa was excluded as it does not report trade data individually but only through the Southern African Customs Union, which comprises five countries (South Africa, Botswana, Namibia, Lesotho, and Swaziland). The European Union was excluded as much of its trade data were already captured in the data of Germany, Italy, France, and the UK.

The final list of countries includes:

- 1/ Argentina
- 2/ Australia
- 3/ Brazil
- 4 / Canada
- 5 / China

- 6/ France
- 7/ Germany
- 8 / India
- 9/ Indonesia
- **10** / Italy
- 11/ Japan
- 12 / Mexico
- 13 / Russia
- 14 / Saudi Arabia
- 15 / South Korea
- 16 / Turkey
- 17 / United Kingdom
- 18 / United States

#### Data source and definitions

#### **BACI** dataset

The import data used for this project were taken from the BACI dataset. 92 BACI is the world trade database developed by the French research centre CEPII (Centre d' Études Prospectives et d'Informations Internationales) at a high level of product disaggregation.

Original trade data are provided by the United Nations Statistical Division (COMTRADE database). BACI is constructed using a procedure that reconciles the declarations of the exporter and the importer. This harmonization procedure enables to extend considerably the number of countries for which trade data are available, as compared to the original dataset. The dataset gives information about the value of trade (v, in thousands of US dollars) and the quantity (q, in tons). Individual trade flows are identified by the exporter (i), the importer (j), the product category (hs6), and the year (t). BACI is available with versions 1992, 1996, 2002, 2007 and 2012 of the Harmonized System (HS) with six-digit disaggregation.

For this project, we used the 2015 BACI trade data set with the 2012 HS nomenclature, which is the most recent one available at the time of writing.

The codebook for countries in the BACI database can be downloaded from http://www.cepii.fr/cepii/en/bdd\_modele/presentation.asp?id=1.

## Harmonized Commodity Description and Coding Systems (HS)

The Harmonized System is an international nomenclature for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes. At the international level, the Harmonized System (HS) for classifying goods is a six-digit code system.

The HS comprises approximately 5,300 product descriptions that appear as headings and subheadings, arranged in 99 chapters and grouped into 21 sections. The six digits can be broken down into three parts. The first two digits (HS-2) identify the chapter the goods are classified in, e.g. 09 = Coffee, Tea, Maté and Spices. The next two digits (HS-4) identify groupings within that chapter, e.g. 09.02 = Tea, whether or not flavoured. The next two digits (HS-6) are even more specific, e.g. 09.02.10 Green tea (not fermented). Up to the HS six-digit level, all countries classify products in the same way (a few exceptions exist where some countries apply old versions of the HS).

The Harmonized System was introduced in 1988 and has been adopted by most countries worldwide. It has undergone several changes in the classification of products. These changes are called revisions and entered into force in 1996, 2002, 2007, 2012, and 2017.

#### Data compilation

Each of the 15 products from the final list in Table 2 is represented by multiple HS product categories within the BACI trade dataset. The relevant HS 2012 product categories for the 15 products were identified using the online directory. https://www.foreign-trade.com/reference/hscode.htm

Using STATA, import data for all relevant product categories and source countries in Table 2 were extracted from the 2015 BACI dataset for all 18 countries listed above.

The 15 products were then ranked from highest to lowest according to import value in US\$. The resulting list of top five products at risk of modern slavery (according to US\$ value) imported by each of the G20 countries is presented in Table 3. The data are also presented in the Importing risk maps on p.120 to 137.

TABLE 3

Top five products at risk of modern slavery (according to US\$ value) imported by G20 countries<sup>93</sup>

G20 country	Import product at risk of modern slavery	Source countries	Import value (in thousands of US\$)
	Laptops, computers and mobile phones	China Malaysia	446,275 20,925
	Apparel and clothing accessories	Brazil China India Malaysia Thailand Vietnam	3,315 157,343 21,809 4,397 5,470 22,792
Argentina	Timber	Brazil Peru	34,219 110
	Fish	Indonesia Japan Korea, Republic of (South Korea) Thailand	74 4 6 20,225
	Carpets	India Pakistan	2,253 17
	Laptops, computers and mobile phones	China Malaysia	6,671,902 351,283
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	177 2,462 4,091,699 167,223 17,180 74,705 166,564
Australia	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	47,346 3 49,675 5,629 277 1,809 40,250 223,118
	Rice	India	40,625
	Cocoa	Côte d'Ivoire Ghana	18,146 4,412
	Apparel and clothing accessories	Argentina China India Malaysia Thailand Vietnam	26,739 1,495,047 147,849 9,950 21,442 95,044
	Laptops, computers and mobile phones	China Malaysia	786,722 45,386
Brazil	Fish	China Indonesia Japan Korea, Republic of (South Korea) Taiwan Thailand	179,143 112 1,268 102 11,372 20,449
	Cattle	Paraguay	124,435
	Cocoa	Côte d'Ivoire Ghana	25,107 32,537

G20 country	Import product at risk of modern slavery	Source countries	Import value (in thousands of US\$)
	Laptops, computers and mobile phones	China Malaysia	7,552,860 67,534
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	66 954 3,723,363 291,598 33,880 64,903 628,708
Canada	Gold	Peru	1,584,163
Canada	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	192,932 289 11,117 10,916 11,456 5,661 15,301
	Sugarcane	Brazil Dominican Republic	243,305 4
	Laptops, computers and mobile phones	Malaysia	1,602,835
	Fish	Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	78,449 90,305 937,468 137,335 153,251 61,166
China	Coal	Korea, Democratic People's Republic of (North Korea)	954,000
	Apparel and clothing accessories	Argentina Brazil India Malaysia Thailand Vietnam	595 162 91,383 24,610 83,970 621,115
	Sugarcane	Brazil	755,999
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	53 3,377 6,418,827 1,041,238 38,178 149,432 578,992
	Laptops, computers and mobile phones	China Malaysia	7,036,778 36,767
France	Cocoa	Côte d'Ivoire Ghana	455,281 156,518
	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	183,007 77,184 18,042 1,088 43,011 39,649 3,136 29,654
	Timber	Brazil Peru	84,504 6,499

G20 country	Import product at risk of modern slavery	Source countries	Import value (in thousands of US\$)
	Laptops, computers and mobile phones	China Malaysia	16,646,149 254,738
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	28 1,290 8,803,808 1,384,465 72,549 148,479 1,041,373
Germany	Cocoa	Côte d'Ivoire Ghana	488,827 127,566
	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	428,976 2,607 21,274 4,029 31,166 4,499 3,210 19,010
	Timber	Brazil Peru	86,760 537
	Laptops, computers and mobile phones	China Malaysia	8,113,175 225,756
	Sugarcane	Brazil	456,472
	Gold	Korea, Democratic People's Republic of (North Korea) Peru	18 363,777
India	Apparel and clothing accessories	Brazil China Malaysia Thailand Vietnam	28 336,039 4,338 9,902 9,738
	Diamonds	Angola	97,062
	Laptops, computers and mobile phones	China Malaysia	1,557,687 100,206
	Apparel and clothing accessories	China India Malaysia Thailand Vietnam	738,729 6,926 23,472 7,330 11,305
Indonesia	Fish	China Japan Korea, Republic of (South Korea) Taiwan Thailand	101,778 17,940 1,880 50,641 4,835
	Sugarcane	Brazil	117,879
	Cocoa	Côte d'Ivoire	46,078

Table 3 continued.

Taole 3 continue			
G20 country	Import product at risk of modern slavery	Source countries	Import value (in thousands of US\$)
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	53 1,965 3,203,516 379,242 8,521 38,604 213,159
	Laptops, computers and mobile phones	China Malaysia	2,830,742 2,425
Italy	Cocoa	Côte d'Ivoire Ghana	168,696 58,575
	Cattle	Brazil Paraguay	222,628 2,526
	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	56,179 14,709 41,424 877 1,053 22,219 8,096 47,712
	Laptops, computers and mobile phones	China Malaysia	22,145,679 245,182
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	959 2,863 17,050,285 227,060 108,725 438,320 2,776,670
Japan	Fish	China Ghana Indonesia Russia Korea, Republic of (South Korea) Taiwan Thailand	1,512,309 2,915 224,319 320,058 369,356 442,238 451,197
	Cocoa	Côte d'Ivoire Ghana	12,920 110,615
	Timber	Brazil Peru	96,184 293
	Laptops, computers and mobile phones	China Malaysia	7,787,135 225,563
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	4,401 1,690 1,230,424 176,321 13,033 8,576 180,205
Mexico	Fish	China Indonesia Japan Korea, Republic of (South Korea) Taiwan Thailand	189,636 10,782 2,756 1,313 2,628 653
	Timber	Brazil Peru	143,162 30,858
	Cocoa	Côte d'Ivoire Ghana	50,939 650

G20 country	Import product at risk of modern slavery	Source countries	Import value
ozo country	import product at risk or modern stately	Source Countries	(in thousands of US\$)
	Laptops, computers and mobile phones	China Malaysia	3,833,771 50,923
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	4 425 2,713,472 140,659 9,274 16,906 144,392
Russia	Cattle	Brazil Paraguay	566,803 350,720
	Sugarcane	Brazil	321,834
	Fish	China Indonesia Japan Korea, Republic of (South Korea) Taiwan Thailand	177,819 11,564 10,331 5,058 8,465 36,122
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	15 768 1,866,408 405,613 11,155 24,404 51,142
Saudi Arabia	Laptops, computers and mobile phones	China Malaysia	1,963,891 28,724
	Rice	India	1,080,016
	Fish	China Indonesia Japan Korea, Republic of (South Korea) Taiwan Thailand	3,172 62,376 11,211 2,028 18,791 123,511
	Sugarcane	Brazil	184,548
South Africa	*No data available*		
	Laptops, computers and mobile phones	China Malaysia	6,979,552 54,313
Korea, Republic of (South Korea)	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	131 319 3,645,332 59,181 8,986 71,944 2,181,292
	Fish	China Ghana Indonesia Japan Russia Taiwan Thailand	613,889 52 33,290 76,388 508,892 93,711 44,531
	Cocoa	Côte d'Ivoire Ghana	409 16,505
	Timber	Brazil Peru	14,897 1,779

Table 3 continued.

			Table 3 continued.
G20 country	Import product at risk of modern slavery	Source countries	Import value (in thousands of US\$)
	Laptops, computers and mobile phones	China Malaysia	3,286,769 18,514
Turkey	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	39 266 694,144 87,433 9,698 10,415 66,246
Turkey	Cocoa	Côte d'Ivoire Ghana	231,487 147,275
	Cotton	Kazakhstan Tajikistan Turkmenistan Uzbekistan	1,034 32,362 207,999 10,622
	Rice	India Myanmar	33,000 288
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	57 1,125 7,298,820 1,858,359 42,100 88,890 745,491
	Laptops, computers and mobile phones	China Malaysia	7,996,205 58,791
United Kingdom	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	227,449 88,377 32,563 4,068 51,306 798 626 75,037
	Cocoa	Côte d'Ivoire Ghana	208,321 77,410
	Rice	India Myanmar	172,921 4,303
	Laptops, computers and mobile phones	China Malaysia	89,490,687 1,546,001
	Apparel and clothing accessories	Argentina Brazil China India Malaysia Thailand Vietnam	316 19,337 30,468,913 3,855,523 564,210 1,079,637 11,258,322
United States	Fish	China Ghana Indonesia Japan Russia Korea, Republic of (South Korea) Taiwan Thailand	1,983,840 121 322,695 169,315 34,876 101,293 136,624 535,025
	Cocoa	Côte d'Ivoire Ghana	981,623 218,650
	Timber	Brazil Peru	843,306 22,402

## Bibliography of products at risk of modern slavery

The following section sets out the results of the literature review that we conducted to identify risk of modern slavery in the products listed in Table 2.

#### Cotton

#### Kazakhstan

Various United Nations organisations have collected evidence that the cotton sector in Kazakhstan is affected by modern slavery, particularly among migrant workers. The UN Special Rapporteur on contemporary forms of slavery conducted an official mission to Kazakhstan in 2012. Kazakhstan is a major destination for low-skilled migrant workers, mainly from Uzbekistan, Kyrgyzstan, and Tajikistan. Forced and bonded labour occurs in the cotton, tobacco, and construction industry. A majority of the migrants come for approximately six months to harvest the cotton but often they do not have official work permits.94 The Special Rapporteur stated during her follow-up visit in 2014 that forms of slavery and forced and bonded labour persist, in particular in the cotton and construction industries.95 In 2016, the UN Human Rights Committee voiced its concerns over reports of forced and bonded labour, particularly of migrant workers, in the tobacco, cotton, and construction industries as well as abuse of migrant workers, including poor and hazardous working conditions, delayed payment, and confiscation of identity documents.96

#### Tajikistan

Forced labour of adults and children during the cotton harvest in Tajikistan has decreased over the last few years. The International Organization for Migration (IOM) conducted studies in 2012, 2013, and 2015 assessing the exploitation during cotton harvest through surveys and interviews with adults and children. IOM found that the observed number of students and children participating in the 2012 cotton harvest (including those that were forcibly mobilised) was a lot smaller than in previous years. Still, the researchers identified frequent labour violations among adults picking cotton, including not being paid for the work and not having a written contract. 97 The results from the 2012 cotton harvest largely confirmed the 2011 results.98 However, the assessment of the 2015 cotton harvest in Tajikistan showed improvements, where only a limited number of children had to pick cotton and none reported having been forced to work. Equally, no adult workers reported having been mobilised or forced to work in the harvest, with only two labour violations being reported.99 On the other hand, the 2017 US Trafficking in Persons (TIP) report suggests that Tajik adults and children may still be subject to forced labour in the annual cotton harvest.100

#### Turkmenistan

Amnesty International's 2016/17 annual human rights report alleges that the Turkmen government continued to use forced labour in the country's cotton picking industry, which is one of the largest in the world. To harvest the cotton, local authorities compel public sector workers, including teachers, medical staff, and civil servants, to pick cotton and to meet individual government-set quotas or else they risk losing their jobs.<sup>101</sup> The ILO Committee of Experts also noted in 2017 that tens of thousands of adults from the public and private sectors were forced to pick cotton and farmers were forced to fulfil state-established cotton production quotas, all under threat of a penalty.<sup>102</sup> Other threats of penalties that have been reported include loss of land, expulsion from university, loss of wages or salary cuts, termination of employment, and other sanctions.<sup>103</sup> In 2014, a Turkmen media initiative gathered evidence from government officials, farmers, public sector workers, and businessmen who provided first-hand accounts, documentary evidence, and photographs showing that Turkmenistan violates international and national laws by forcing farmers and other citizens to work in the cotton sector.<sup>104</sup>

#### Uzbekistan

Uzbekistan has been under scrutiny for a long time for forced labour in its annual cotton harvest. A monitoring report of the 2017 cotton harvest published by the ILO states that most cotton pickers were recruited voluntarily and that the systematic use of child labour in Uzbekistan's cotton harvest has come to an end.<sup>105</sup> The previous ILO monitoring report of the 2016 cotton harvest stated similar results on child labour but concluded that forced labour remained a risk for some categories of people, such as staff of educational and medical facilities and students.<sup>106</sup>

However, other research published by Human Rights Watch (HRW) and the Uzbek-German Forum for Human Rights details the existence of forced labour in the cotton industry in Uzbekistan, mostly based on interviews and field visits. A 2017 report documents forced adult and child labour in one World Bank project area and demonstrates that it is highly likely that the World Bank's other agriculture projects in Uzbekistan are linked to ongoing forced labour in light of the systemic nature of the abuses.<sup>107</sup> The Uzbek-German Forum for Human Rights estimated that during the 2015 cotton harvest the government forced more than a million people of all backgrounds to pick cotton in the fields against their will and under threat of penalty.<sup>108</sup> Similar estimates were provided in a HRW report in 2013.<sup>109</sup>

#### **Bricks**

#### Afghanistan

Bonded labour in Afghanistan is reportedly most prevalent in the brick kilns near Kabul and the Nangarhar province. Each kiln employs around 10 to 30 families, who live on site and work 10 to 15 hours per day exposed to sun and dust. Children work in hazardous conditions alongside their debtbonded parents. The seasonality of the work is one reason children do not go to school, another reason being that families need all children to work as many hours as possible to help pay off the family debt. 110 The ILO and UNICEF conducted a study of Afghanistan's brick industry, using a mix of focus group discussions and interviews with children, adults, and kiln owners. They found that 68 percent of child labourer respondents said they could not stop working at brick kilns if they wished to. About 86 percent of children said their parents are forcing them to work at the kilns and, of these, 83 percent cited the reason that their parents owed money to someone else.<sup>111</sup> Workers' debt can be sold off several times, with higher interest rates attached to each sale; this can be negotiated by the workers themselves or among kiln owners. In this way, indebted families must follow their debt to the next kiln owner.<sup>112</sup>

#### India

The brick industry in India is huge with more than 150,000 brick production units in the country employing an estimated 10 million workers and contributing £3bn (US\$4.2bn<sup>113</sup>) to the Indian economy annually. During the six-month production season, tens of thousands of families come to work in the brick kilns in Andhra Pradesh. The industry is known to rely on entire families working in bonded labour, with minimum pay and few or no health and safety regulations.<sup>114</sup> Families work 12- to 18-hour days under squalid conditions, including severe abuses.<sup>115</sup> The Andhra Pradesh state labour commissioner has denied bonded labour exists.<sup>116</sup> In 2015, the International Justice Mission (IJM) reportedly tipped off officials to a bondage situation in a brick kiln in Thiruvallur district, which led to the rescue of 333 bonded labourers, including 75 children. The workers each had to pay recruitment fees and were promised 300 rupees (US\$4.6<sup>117</sup>) a day but were only paid 200 rupees (US\$3<sup>118</sup>) a week.<sup>119</sup> In 2017, a brick kiln owner who was accused of trapping and abusing 12 labourers was found guilty under India's Bonded Labour System Abolition Act (1976) and Section 370 of the penal code covering human trafficking.120

#### Myanmar

In a 2016 case in Kyaikmaraw township in Mon State workers claim they were starved and abused while working at a brickyard. The workers, many of whom were young women and children, said they had been forced to work from 3am

to 10pm with no time off for food or rest, and were paid less than they were promised. The workers were freed during two raids by officials, including anti-trafficking police.<sup>121</sup> The owners of the brick works denied the accusations. In January 2017, the state's factories and general labour law department announced a reversal on plans to pursue legal charges against the brickyard owner. It was reported that the brickyard owner will not be facing charges but instead a warning will be issued.<sup>122</sup> It remains therefore unclear if the alleged accusations were valid or not.

#### Nepal

Due to the seasonal nature of the job and the tough and demanding working conditions, brick kiln workers in Nepal often come from marginalised and poor communities and have few employment alternatives. Many brick kiln owners ensure a steady supply of cheap labour through a system of loans and debt that ties workers to the kiln for months or years. Brought to the kilns by middlemen, workers are offered the financial incentive of an advance to get them through the monsoon months. In return, they must turn up for work at the start of the next brickmaking season, which runs from November to May, in order to pay back the loan.<sup>123</sup> A 2015 *Guardian* investigation revealed that bricks tainted by human rights abuses, such as child labour, have been used in major construction projects in Nepal. The findings suggest that international donors, aid agencies, multinational companies, and the Nepalese government are systematically failing to ensure that effective policies are in place to keep brick supply chains free of child and bonded labour and that they have failed to recognise the appalling conditions prevalent in Nepal's brick industry.<sup>124</sup>

#### Pakistan

Ethnographic research into brick kilns in the areas of Gujarat, Islamabad, and Rawalpindi in 2015 and 2016 showed that they are the primary sector in which bonded labour occurs in Pakistan. Debt chains drive the brick industry because they guarantee cheap labour and a continuous supply of workers. Debt passes down through the generations and from one kiln to another.<sup>125</sup> A 2014 study looking at Pakistan's peshqi system of debt bondage found that workers in brick kilns were working under squalid conditions that lacked safe drinking water and access to health facilities, and they were denied any chance of upward mobility or contact with their families.<sup>126</sup> Several UN treaty bodies were concerned that, despite Pakistan's adoption of the Bonded Labour System (Abolition) Act of 1992, bonded labour practices persisted in the brick kiln industry.<sup>127</sup> The UN Human Rights Committee reported in 2017 that it was concerned by the high number of children engaged in labour under hazardous and slaverylike conditions in Pakistan's brick kilns. 128

#### Garments

#### Brazil

A 2012 study interviewing cross-border migrants from Bolivia who worked in the garment sector in Brazil found workers reporting conditions of "unfree" labour and exploitation, including workplace hazard, substandard accommodation, extremely long working hours, non-payment, and illegal pay deductions. <sup>129</sup> A 2013 report notes that any migrant workers from poorer Latin American countries such as Bolivia, Peru, or Haiti have to endure abuse and exploitation working in the booming textile sector in São Paulo. <sup>130</sup> In 2016, an *Aljazeera* investigative journalist team discovered clandestine textile sweatshops in the Bras neighbourhood in the heart of São Paulo, in which underpaid workers toil for long and exhausting hours in dreadful conditions to mass produce garments for the country's clothing industry. <sup>131</sup>

#### China

Between 2007 and 2013, researchers interviewed 59 people recently released from drug detention "re-education through labour" centres in China. Respondents reported that they were forced to work in clothing production (among other activities). Detainees also reported being punished if they refused to perform labour. They received no pay for their work.<sup>132</sup> In 2017, workers at a factory producing shoes for international brands in south eastern China reported they were physically and verbally abused.<sup>133</sup> Another news report alleges forced overtime at the same factory.<sup>134</sup> In 2017, inspections by the Fair Labour Association, a USbased industry monitoring group, in a factory in China producing clothes for international brands exposed that workers were made to work excessively long hours to hit production targets and were paid below China's minimum wage.135 The audit also found that the factory breached 24 international labour standards set by the International Labour Organization although it is unclear if the Forced Labour Convention was one of them. 136

#### India

A 2016 qualitative research report details the grievances of young women under the Sumangali or "camp labour" schemes, whereby workers are housed in companyowned hostels with restricted freedom of movement. This approach is used to ensure the women are available to work on call and are unable to unionise. A portion of their pay is withheld until completion of their fixed-term contracts. Women from lower castes in remote regions are specifically targeted during recruitment.<sup>137</sup> Other research based on interviews with more than 150 girls and young women on annual leave from mills in Tamil Nadu in 2013 concluded that girls and young women are lured to the Tamil Nadu spinning industry by false promises and are forced to work under appalling conditions. It was mentioned that their freedom of movement is restricted, mobile phones are not allowed, and workers are effectively locked up in the mills. They work 60 hours per week year-round and cannot refuse

overtime. Management employs humiliating disciplinary measures and does not provide paid sick leave despite harsh conditions without protective equipment.<sup>138</sup> Many women under the *Sumangali* scheme never receive the lump sum payment they are promised will be paid at the end of their term because they leave early, often due to illness. Although this is recognised by Indian courts as a form of slavery, it is widely practiced in states such Tamil Nadu.<sup>139</sup> It is also suggested that bondage in the garment industry is not only the result of debt-based structures but also forced labour and wage theft. Overtime is required without workers' consent and sometimes even without proper compensation and enforced by threat of firing.<sup>140</sup>

#### Malaysia

The garment and textile industry in Malaysia has been found in many cases to be dangerously negligent about enforcing legal standards regarding wages and working conditions of migrant women workers. Research based on qualitative, in-depth interviews with 30 migrant women workers from Burma who came to Malaysia to work in the garment industry found that workers had no employment contracts or, where they did, the contracts were illegal. Workers regularly worked 10-hour days without overtime pay and faced harassment and unsafe working and living conditions. In return, they received wages far below the minimum needed to survive. All interviewed women also reported that their passports were held by their employer or an outsourced hiring agent.<sup>141</sup>

#### Thailand

Research involving interviews in the field with migrant workers working in garment factories in the Mae Sot region of Thailand during 2014 shows how migrants working in the textile and garment factories there are vulnerable to labour rights violations and exploitation, including being paid less than other Thai workers, having their documentation confiscated, and paying too much into health and social benefit plans that they do not know how to claim. While the research does not clearly reveal modern slavery, practices such as withholding of identity documents can be indicators of that.

#### Vietnam

Between 2007 and 2013, researchers interviewed 34 people recently released from drug detention centres in Vietnam. Researchers found forced labour reported by all respondents detained in Vietnam, with some of the detainees forced to work in textile production. Regulations give treatment centre management the authority to punish detainees who refuse to perform labour. Respondents indicated being paid an average wage of US\$7.30 a month before deductions for food, though several former detainees reported still owing the detention centres money for additional fees at the end of their sentences. A 2013 media article reported the case

of three boys who escaped a garment factory in Ho Chi Minh City where they had spent two years making clothes for no pay. It is also reported that during a recent raid of a garment factory, Vietnam-based charity Blue Dragon Children's Foundation found 14 people that were working under exploitative and dangerous conditions.<sup>144</sup>

#### Cattle

#### Bolivia

Bolivia's cattle industry is suspected to be at risk of modern slavery. In 2010 to 2011, US-based NGO Verité carried out both qualitative and quantitative field research on cattle, corn, and peanuts in the Chaco region. The research detected severe indicators of forced labour, including physical confinement at the work location, psychological compulsion, induced indebtedness, deception or false promises about terms of work, and withholding and non-payment of wages. There was also evidence of the presence of indicators of menace of penalty, including physical violence against workers, sexual violence, and loss of social status. Other issues of concern detected during research included excessive working hours, a lack of days off for workers in animal husbandry, subminimum wages, serious hazards to workers' health and safety, and child labour.<sup>145</sup>

#### Brazil

In 2017, the Government of Brazil was ordered by the Inter-American Court of Human Rights to pay US\$5 million to 128 former farm workers who were enslaved on a Brazilian cattle farm between 1988 and 2000.146 During a 2017 raid at a cattle ranch in the Amazonian rainforest of northern Brazil, labour inspectors found seven workers who claim they were made to live in shacks, worked 12-hour days, were paid infrequently, and had money deducted from their wages for alleged debts they owed to their boss.147 UK supermarket chain Waitrose announced it was taking its own-branded corned beef from Brazil off supermarket shelves after it was revealed that one of the world's largest meat processing companies previously purchased cattle from a farm under federal investigation for using workers as modern-day slaves in 2016. Prosecutors believe the workers were in debt bondage, with payments for food and protective equipment illegally deducted from their wages.<sup>148</sup>

#### Niger

Niger continues to be afflicted by descent-based slavery where people are born into slavery with slave status being passed down the maternal line. The UN Special Rapporteur on contemporary forms of slavery conducted a mission to Niger in 2015 which found that despite being legally abolished, descent-based slavery continues to exist in Tuareg, Fulani (Peul), Toubou, and Arab communities where slaves still live with their masters. The slaves are at the entire disposal of the master; in exchange, they are fed and clothed. Slaves reportedly work long hours, mainly in cattle rearing, agriculture, and domestic work, and are not paid.<sup>149</sup>

#### **Paraguay**

According to a 2013 report of the ILO Conference Committee on the Application of Standards, various worker representatives of Paraguay stated that debt bondage of indigenous communities on land used for cattle-raising is an issue the Paraguayan authorities are well aware of. One of the most serious issues is reportedly the debts incurred by farm workers through having to buy food from their employers, who determine the prices. The worker representatives also requested that further measures should be taken by the government to prevent forced labour and provide support to indigenous communities in the cattle industry.<sup>150</sup>

#### Sugarcane

#### Brazil

A 2012 study examining slave labour in Brazil conducted semi-structured interviews with internal migrants in the sugarcane industry. Workers reported indicators of "unfree" labour and exploitation, including workplace hazards, substandard accommodations, extremely long working hours, non-payment, and illegal pay deductions.<sup>151</sup> The Brazilian sugar industry has also been highlighted in the media. More than 10,000 workers were liberated from slave-like conditions in sugar production between 2003 and 2011.<sup>152</sup> During harvest time, one single sugar mill can hire as many as 5,000 workers and those who come from outside the area end up becoming trapped in debt to survive, working in precarious conditions.<sup>153</sup>

#### Dominican Republic

Using a combination of qualitative and quantitative methods, Verité conducted research on the supply chain of sugar in the Dominican Republic during the 2008 to 2010 harvests. They detected evidence of multiple indicators of forced labour, including indicators of lack of consent (e.g. physical confinement in the workplace, deception about terms of work) and indicators of menace of penalty (e.g. physical violence against workers and deprivation of food and shelter). Other issues of concern detected during the research included illegal deductions and working hours in excess of legal limits.<sup>154</sup> Another paper published in 2016 explores the use of workers from neighboring Haiti in the Dominican agricultural sector and the widespread human rights violations they face, particularly in the country's sugarcane "batey" communities.<sup>155</sup>

#### Gold

#### Democratic Republic of the Congo

There is evidence indicating that the gold mining industry in DRC is at risk of modern slavery. Field research conducted by "Free the Slaves" in three mining sites in the South Kivu province from June 2012 to January 2013 revealed that forced labour affected 10 percent of individuals in Kamituga, 24 percent of those in Lugushwa, and 61 percent of those in Nyamurhale. In Nyamurhale, forced labour occurred primarily at the hands of the military and local authorities. In Kamituga, the so-called President Director Generals (PDGs, a term coined to designate the owner of one or more mining shafts who employs several miners) and conductors (miner team leaders who supervise the work undertaken by the miners) subjected individuals to forced labour in the form of excessively heavy labour and/or long days.<sup>156</sup> Another study found that while the type of mineral mined is not generally found to be a predictor of trafficking, respondents in cassiterite mines were twice as likely to report sexual violence as those in gold mines.157

#### North Korea

A UN Human Rights Council report describes how a former inmate of a prison camp worked in the limestone quarry and the gold mine of Ordinary Prison Camp (kyohwaso) No. 4 in Kandong County, South Pyongan Province. The inmates there were so tired and exhausted that work accidents were very frequent. On one occasion, one inmate suffered an open fracture of his foot in a mining accident. The skin was sewn together without anaesthesia and he was ordered to report back to the mine the same day. The inmate reportedly survived only because the head of his work unit reassigned him to lighter duties.<sup>158</sup>

#### Peru

Verité carried out qualitative research, interviewing workers from August 2012 through January 2013, to assess the risk of forced labour in illegal gold mining in Peru. Workers reported that when they arrived at the mining camps, many were told that they owe their recruiters for the advances. The workers found that their pay and working conditions were not what they had been promised. They were told that they would have to work at least 90 days to pay off their debt before they would be paid anything or before they would be allowed to leave, which constitutes induced indebtedness. Workers are unable to leave their employment before their contracts are up due to their extreme physical isolation and their lack of money to pay for transportation to leave their workplaces, which constitutes physical confinement in the work location. Interviewees reported that workers who wanted to leave were held against their will with the threat of physical violence by heavily armed guards. 159

#### Carpets

#### India

A 2014 report by Harvard University's FXB Center for Health and Human Rights documented more than 3,200 cases of forced labour under Indian law and 2,600 cases of forced labour under the ILO Forced Labour Convention (no. 29) across nine states in India's hand-made carpet industry. The findings include 2,010 cases of bonded labour, 1,406 cases of child labour, and 286 cases of human trafficking. The research used both primary and secondary sources. Qualitative and quantitative data were collected through individual interviews with labourers in the carpet sector. Semi-structured interview questionnaires were used for discussion with key informants to gather information on the nature of their work in the carpet industry.<sup>160</sup>

#### Pakistan

A 2017 study conducted in provinces of Sindh, Punjab, and Baluchistan, using witness opinions, case profiles, and secondary information, found that children working in carpet-weaving are often engaged in hazardous work, suffering injuries such as eye and lung diseases due to unsafe working conditions. The report also notes that bonded child labour exists in Pakistan's carpet industry. <sup>161</sup> Although hazardous child labour is not necessarily considered modern slavery, it is perceived to be a severe problem in the carpet industry of Pakistan. A cross-sectional survey of 320 children working in the carpet industry in Punjab province found that hazardous forms of child labour are evident, with notable consequences to the health of the children. <sup>162</sup>

#### Coal

#### North Korea

It is reported that North Korea relies on forced labour on a large scale to operate its mining industry. The allocation of labour to the coal and mining industries is not formally regulated by law. However, the ruling party compels certain individuals to work in these sectors as a matter of policy. For those working in this industry, moving to a different sector or occupation is strictly limited and controlled. Under the regime's songbun classification system (a loyalty-based social discrimination system) the most powerless members of society and those of low songbun are forcibly assigned to work in the mining sector. This occupational assignment is passed down from generation to generation.<sup>163</sup> The political prison camps run their own factories, farms, mines, and logging operations, producing among other things coal, clothing for the military, and consumer goods. A witness cited in a UN report, Ms. Kim Hyesook, said she had to work in a coal mine at Political Prison Camp No. 18 from age 15. Although there was nominally a system of three shifts, they ended up having to work 16 to 18 hours a day to maximise output. The men dug up the coal with picks and shovels. The women then had to manually transport the coal to the surface using sacks, buckets, or coal trolleys. Both her husband and her brother died in mining accidents. Like many others forced to work in the mines, Ms. Kim still suffers from black lung disease. Forthcoming research on modern slavery in North Korea, based on interviews conducted with a sample of North Korean defectors, notes that being a coal miner is inherited rather than being a choice. One interview notes that "In North Korea if your parents work in the coal mines, so will you." He reported he was not paid for this work and he was not free to leave or quit. He had also never seen or even heard about an employment contract for the work he was doing at the coal mine. 165

#### Pakistan

A 2014 survey by the Human Rights Commission of Pakistan identified coal mining as one of 34 industries in which hazardous child labour occurred. 166 To make ends meet, children are forced to work regardless of occupational hazards. Such is the case of children interviewed during the course of research conducted in Shahrig, Balochistan. Though many yearn to be enrolled in schools, they have no choice but work in the coal mines to earn a stable income for the family.<sup>167</sup> The 2017 US TIP report notes that bonded labour is concentrated in Sindh and Punjab provinces but also occurs in Balochistan and Khyber Pakhtunkhwa provinces, mainly in agriculture and brickmaking but also to a lesser extent in mining.<sup>168</sup> Although the references listed in this paragraph do not provide clear-cut evidence of modern slavery in Pakistan's coal industry, it should be noted as a potential issue.

#### Fish<sup>169</sup>

#### Ghana

In 2013, the International Justice Mission (IJM) conducted an operational assessment in the southern region of Lake Volta and found that more than half (57.6 percent) of children working on southern Lake Volta's waters were trafficked into forced labour. In 2015, in-depth qualitative research was conducted in the top three destination and top three source communities for trafficking. Each of the fishing communities sampled during the qualitative study confirmed the presence of child trafficking. Both studies revealed that the majority of children working in Lake Volta's fishing industry are generally 10 years old or younger. <sup>170</sup>

Our forthcoming research suggests that of the top 20 fishing countries (by volume of catch), China, Japan, Russia, Spain, South Korea, Taiwan, and Thailand are at highest risk of modern slavery in their respective fishing industries.<sup>171</sup> Given that instances of serious labour abuses have been documented for China, Japan, Russia, South Korea, Taiwan, and Thailand (see below), we have added those countries to the original list of countries at risk of using modern slavery in the fishing industry.

#### China

A report by IOM and the NEXUS Institute describes the labour exploitation of Cambodian migrants aboard commercial fishing vessels operating in South African waters. The report is based on the experiences of 31 Cambodian men trafficked for fishing to South Africa by Giant Ocean, a legally registered recruitment agency in Cambodia, between 2010 and 2013, as well as on interviews conducted with more than 40 key informants in 2014. In the cases where the exploited fishers could remember the flag of the vessels on which they worked (which was about one third of the men), vessels from China were identified. The exploited fishers from Cambodia were recruited by brokers in their own villages but were often misled about where they would be going and what exactly the work would entail. All the men reported being forced to work long hours in harsh conditions, even when sick or injured, and that they had their identity documents withheld while on the vessels.<sup>172</sup> According to a 2014 media report, a group of 28 immigrants from Ghana and Sierra Leone were held in slavery on a Chinese-flagged fishing vessel off the coast of Uruguay, where they were beaten and forced to work without pay.173

#### Indonesia

A 2018 report draws from investigations conducted by the Indonesian Ministry of Marine Affairs and Fisheries (KKP), the Indonesia Presidential Task Force to Combat Illegal Fishing, and from assessments conducted by the IOM Indonesia with fishers and seafarers, both foreign nationals and Indonesians, who were identified as victims of trafficking and provided with IOM assistance. Victims reported being recruited from numerous countries and forced to work illegally within Indonesia. They suffered severe human rights violations, including 18- to 20-hour workdays, no payment, withholding of identity documents, physical and mental abuse, and inhumane living conditions.<sup>174</sup> Another study analyses data from interviews with 446 males who participated in the Study on Trafficking, Exploitation and Abuse in the Mekong (STEAM) and who reached the country of exploitation. STEAM is a multi-site, longitudinal survey carried out with men, women, and children receiving posttrafficking assistance in Thailand, Cambodia, and Vietnam. The main destination country was Indonesia (46.9 percent) for fishermen.<sup>175</sup>

#### Japan

In the same report by IOM and the NEXUS Institute mentioned above, some of the exploited Cambodian fishers identified that the vessels they had been exploited on were from Japan. Similarly, they reported having been recruited by brokers in their own villages who worked for a legally registered recruitment agency. All the men reported being forced to work long hours in harsh conditions, even when sick or injured and had their identity documents withheld while on the vessels. They reported that crew on the Japanese-flagged fishing vessels were usually of mixed nationalities — Cambodia, China, Indonesia, Malaysia, Myanmar, the Philippines, Taiwan Province of China, and Vietnam. 176

#### Russia

After the sinking of a Russian trawler in April 2015 that left 42 fishermen from Myanmar dead, a media report revealed that two of the five Myanmar recruitment agencies responsible for sending the men from Myanmar aboard this vessel had knowingly falsified workers' registration cards. The agencies said that such practices were standard in the industry and that they regularly registered recruited seamen to governmentapproved vessels, but after doing so sent the workers into uncharted territories and unpermitted industries such as the fishing sector. Families of the deceased crewmen reported that the men did not know they were being sent to a fishing vessel until it was too late. When the men found out they had been deceived, they were given no other employment options. Since the fishermen had already paid excessive fees to the recruitment agency, they reportedly felt they had little option but to work in fishing in exchange for promised high wages.<sup>177</sup>

#### South Korea

Reports from media and NGOs cite severe labour abuse aboard South Korean or South Korean-flagged vessels. In 2011, abuses were identified aboard a South Korean-flagged ship manned by Indonesian fishers, trawling in the waters off New Zealand. In 2011 and 2012, an investigation conducted by the Environmental Justice Foundation uncovered numerous instances of South Korean-flagged vessels involved in illegal fishing. In two of these cases, human rights abuses were reported involving fishermen from Senegal, China, South Korea, Vietnam, and Sierra Leone. The investigation uncovered child labour involving crew members as young as 14 years old, with crew forced to sleep in cramped and unhygienic sleeping quarters and paid in trash fish instead of cash.

#### Taiwan

Fishers who were interviewed by Greenpeace in 2014 and 2015 at ports in Taiwan and Fiji described regularly not being paid by their agent or captain, being debt bonded, receiving very low pay rates, having their pay heavily reduced by exorbitant fees, and living in horrific conditions. Research by the IOM found that the majority of Indonesian fishermen victims of trafficking assisted by IOM Indonesia between 2011 to 2015 worked on Taiwanese fishing vessels. Is In 2014, a media article reported exploitation in Taiwan's fishing industry. An interviewed worker described that he was forced to work almost 24 hours a day and did not get paid a full salary. Other workers were allegedly not given enough food and during two years at sea, the boat reached port just once as transport boats normally took the catch to land.

#### **Thailand**

A Human Rights Watch report based on 248 interviews with current and former workers in the fishing industry conducted from 2015 to 2017 documents forced labour and other human rights abuses in the Thai fishing sector. It identifies poor working conditions, recruitment processes, terms of employment, and industry practices that put already vulnerable migrant workers into abusive situations – and often keep them there. A 2016 study found that 76 percent of fishers had been in debt bondage and almost 38 percent of fishers had been trafficked into the Thai fishing industry between 2011 and 2016. The study identified that 6.5 percent of fishers surveyed had been deceived into working aboard Thai vessels, 3.6 percent had been confined, 31.5 percent had been forced to work, and 15.7 percent had been physically abused. 183 Surveys conducted among fishers employed on Thai boats fishing in national and international waters identified that almost 17 percent of fishers interviewed reported that they were working against their will and were unable to leave. Of these fishers, 12 percent identified financial penalty as the reason they were unable to leave, and 4.9 percent identified threat of violence and fear of being reported to authorities as the reason.<sup>184</sup> Greenpeace interviewed 15 human trafficking victims who worked as fishers aboard Thai fishing vessels between 2014 and 2016. Several victims reported being deceived into working aboard fishing vessels and into paying large sums for passport documentation, witnessing physical abuse against the crew, and accruing large debts from recruitment. Another paper discusses the findings of a large-scale survey of 596 fishers from Thailand, Cambodia, and Myanmar undertaken in four coastal provinces in Thailand. Nearly 17 percent of respondents identified themselves as being victims of forced labour for human trafficking.<sup>186</sup> In-depth interviews conducted by the Environmental Justice Foundation (EJF) with six victims of slavery in 2015 uncovered multiple abusive fishing companies in a town where corrupt officials continue to operate with impunity, trafficking networks remain unbroken, and men are still forced to fish aboard Kantang boats - trapped in an endless cycle of debt, exploitation, and abuse.187

#### **Rice**

#### India

There is evidence of some cases of modern slavery in India's rice industry. An Indian rice mill owner was convicted of holding multiple families inside the mill, initially binding them with debt through advances and locking the facilities and denying workers permission to leave. <sup>188</sup> In another instance, the International Justice Mission Chennai helped the government rescue 17 children, women, and men from forced labour. They had been forced to work 12-hour days and lived inside a rice mill in Kancheepuram, trapped for at least five years and were forced to transplant paddy. <sup>189</sup> A media article reported of a couple celebrating freedom after 22 years of bonded labour at a rice mill factory in Punjab. <sup>190</sup>

#### Myanmar

A 2014 report on human rights abuses in Myanmar since the 2012 ceasefire notes that although it has decreased, forced labour, often imposed by the army, still exists in Myanmar. The head of a village who was interviewed as part of the research reported that people in his village had to perform forced labour every year. This included ploughing, sowing rice, reaping the paddy, and then collecting the cut paddy in the storage place.<sup>191</sup> Other research conducted over a sixmonth period from November 2011 to May 2012 observed forced labour practices, mostly exacted by the army, in Northern Arakan/Rakhine State of Myanmar. A decrease in forced labour was found in Central and North Maungdaw. Some of the interviewees reported being forced to supply rice to the army camp in their areas. 192 The ILO maintains together with the Government of the Union of Myanmar a forced labour complaint mechanism that gives Myanmar residents the opportunity to confidentially report cases of forced labour.<sup>193</sup> Although reductions in the use of forced labour have been recorded since 2011 and particularly since the commencement of the peace negotiations, 194 the situation in Myanmar is currently difficult to determine given the violence against Rohingya refugees, which has created the world's fastest growing refugee crisis. 195

#### **Timber**

#### Brazil

#### North Korea

Human Rights Watch reported that North Korea's political prison camps are characterized by systematic abuse in which political prisoners face backbreaking forced labour, including in logging.<sup>199</sup> Similar information can be found in the report of the UN Human Rights Council from 2014, which found that North Koreans forcibly repatriated from China are often sent to holding facilities. There, adults were forced to work hard for 10 hours a day in brick laying, timber cutting, and farming. If they did not fulfil their daily work quota they had to work even longer hours.<sup>200</sup>

#### Peru

According to the UN Universal Period Review on Peru, the UN Committee on the Elimination of Discrimination against Women highlighted in a 2017 report that it was concerned about trafficking of adolescent girls for sexual or labour exploitation, particularly in Peru's mining and logging industries.<sup>201</sup> Research carried out during 2014 studied the role of teenage labour in the timber industry of one of Peru's main timber producing regions, the Ucayali region. The study shows that out of a sample of 27 male teenagers aged between 15 and 17 years old, three met the ILO criteria for forced labour and reported having been trafficked.<sup>202</sup> Fieldwork carried out in the same region in 2011 examines commercial sexual exploitation of children and teenagers in the wood mills and river ports of the city of Pucallpa, where the timber industry is one of the main economic activities. The paper finds that women generally act as pimps for children and teenagers, and in many cases they are either blood-kin to the victims or their "godmothers." 203

#### Brazil nuts/chestnuts

#### Bolivia

Verité carried out research on the presence of indicators of forced labour in the production of brazil nuts in Bolivia between 2009 to 2010. The research was based on surveys and found that respondents working in the production of brazil nuts reported multiple indicators of forced labour. This included being denied leave, being confined in inaccessible places, experiencing death threats and/or physical abuse against themselves or family member, who said they wanted to leave, induced indebtedness, being deceived about the type of work they would be doing, and withholding of wages or identity documents.<sup>204</sup>

#### Cocoa

#### Côte d'Ivoire

Surveys conducted by the Walk Free Foundation and Tulane University in Côte d'Ivoire in 2017 identified cases of modern slavery among adults and children working in cocoa agriculture, between 2013-2017 (rate of forced labour for adults was 4.2/1000 adults working in medium and high growing regions; for children the rate was 3.1/1000 children working in medium to high growing regions). To provide some context, the cocoa sector of Côte d'Ivoire has long faced allegations of child labour and hazardous child work. Research conducted by Tulane University during the 2013/2014 harvest season found that almost 2.3 million children between 5 and 17 years of age were working in cocoa production in Côte d'Ivoire and Ghana. Of those children, approximately 2.1 million were in child labour, including 2 million in hazardous work.<sup>205</sup> An earlier study conducted in 2008/2009, also by Tulane University, found that just over seven percent of the interviewed children in Côte d'Ivoire and just over five percent of the children

interviewed in Ghana reported they were forced to perform work in cocoa agriculture. The majority of these children indicated that a parent or other relative had forced them to work. The same study documented fewer than 10 cases of potential forced adult labour in cocoa agriculture in both countries. The Fair Labour Association conducted 13 unannounced independent external monitoring visits to four cooperatives in Côte d'Ivoire supplying to Nestlé via the Nestlé Cocoa Plan. One case of forced labour was revealed as well as 31 young workers between the age of 15 and 18. According to media, police in Côte d'Ivoire freed 48 child slaves in raids on plantations in the country's Western cocoa belt and arrested 22 people accused of trafficking or exploiting children.

#### Ghana

Surveys conducted by the Walk Free Foundation and Tulane University in Ghana in 2017 identified cases of modern slavery among adults and children working in cocoa agriculture, between 2013-2017 (rate of forced labour for adults was 3.3/1000 adults working in medium and high growing regions; for children the rate was 20/1000 children working in medium to high growing regions). While no other recent studies have focused on forced labour in the cocoa industry, it should be noted that hazardous child labour has been found to be common in the cocoa sector in Ghana. There have also been instances of trafficking of children to cocoa growing areas in Ghana.<sup>210</sup> Research conducted by Tulane University during the 2013/2014 harvest season found that almost 2.3 million children between 5 and 17 years of age were working in cocoa production in Côte d'Ivoire and Ghana. Of those children, approximately 2.1 million were in child labour, including 2 million in hazardous work.211 An earlier study conducted in 2008/2009, also by Tulane University, found that just over seven percent of the interviewed children in Côte d'Ivoire and just over five percent of the children interviewed in Ghana reported they were forced to perform work in cocoa agriculture. The majority of these children indicated that a parent or other relative had forced them to work.<sup>212</sup>

#### **Diamonds**

#### Angola

Diamond extraction in Angola has over the past decades been linked to torture, murder, and forced displacement, and relies on both child labour and forced labour. Research published in 2016 suggests that undocumented migrant children from the Democratic Republic of the Congo enter Angola to work in diamond-mining districts and experience conditions of forced labour or commercial sexual exploitation in mining camps.<sup>213</sup>

## Electronics – laptops, computers and mobile phones

#### China

A 2015 report based on expert interviews and interviews with interns and workers identifies forced labour in internship programs at electronic factories in China. Chinese students are sent to electronics factories under the pretence of "internships" during their university holidays to be able to get their university degree.<sup>214</sup> In 2012, China Labor Watch reported children and students being exploited at an electronics factory supplying to Samsung. The abuses included underpayment, excessive working hours, illegal salary deductions, and not giving employees a copy of their work contract. Child workers had to carry out hazardous tasks resulting in injury.<sup>215</sup> Another investigative report reveals some instances of exploitation and forced labour at some of Apple's largest suppliers. Major violations included poor living and working conditions, wage deductions, working overtime without compensation, and withholding of identity documents.216

#### Malaysia

In 2014, Verité conducted interviews with 501 workers in more than 100 electronics factories throughout Malaysia and found that 28 percent of the workers were in forced labour. Among foreign workers alone, 32 percent were in forced labour. The forced labour experiences were usually linked to recruitment fees that workers had to pay to get a job. Seventy-seven percent of workers who were charged fees had to borrow money in order to pay them. Other abuses experienced by workers were passport retention, restriction of freedom of movement, being unable to leave their employer before the end of their work contracts, and poor living conditions. <sup>217</sup> Another case study by Verité confirms those findings on exploitative practices in Malaysia's electronics sector. 218 According to a news report, Samsung and Panasonic, two of the world's leading electronics brands, are also facing allegations that workers in their supply chains are being exploited and underpaid in Malaysia. Both have launched investigations into allegations of abuse made by Nepalese workers who said they had been deceived about pay, had their passports confiscated, and had been told that they would have to pay extensive fines if they wanted to return to Nepal before the end of their contract.219

A young Rohingya refugee sits at the site of a destroyed camp in New Delhi in April, 2018, following a fire that broke out at their camp that left around 200 people homeless. No casualties were reported. The refugees living in New Delhi have fled persecution in Myanmar, with their numbers increasing following a brutal crackdown starting in September 2017 that saw hundreds of thousands pouring into neighbouring Bangladesh.

Photo credit: Money Sharma/AFP/Getty Images



## **APPENDIX 4:**

### Methodology for assessing vulnerability to modern slavery in fisheries

### Background

Reports of modern slavery in marine fisheries indicate a need to properly assess the scale of the issue globally. Given most countries around the world are involved in marine fishing, a clearer understanding of the risk factors associated with vulnerability to modern slavery in fisheries is required to effectively allocate resources to research and remedy in those countries most at risk.

Joint research undertaken by researchers from the Sea Around Us at the University of Western Australia and the University of British Columbia, and the Walk Free Foundation has sought to identify those characteristics which most strongly suggest modern slavery aboard fishing vessels. The goal was to develop a risk model that indicates where undetected modern slavery issues in the global fishing industry may exist. The research methodology and results are the subject of a forthcoming peer reviewed paper. <sup>220</sup>

In summary, the research sought to use statistical testing to understand the relationship between data on prevalence of modern slavery and data on fisheries governance and performance sourced from the Sea Around Us.<sup>221</sup> The analysis was limited to the 20 largest fishing countries, which collectively land 80 percent of the world's fisheries catch. The analysis was based on the prevalence data from the 2016 Global Slavery Index<sup>222</sup>, and media and NGO reports of slavery incidents in fisheries, while the fisheries sector data were derived from the *Sea Around Us* project and other key sources<sup>223</sup>. The analysis identified six key characteristics of the fisheries sector that predict vulnerability to forced labour at a national level:

- 1/ The percentage of national catch caught outside a country's Exclusive Economic Zone (EEZ)<sup>224</sup> with higher values indicating greater vulnerability.
- 2/ The mean distance (km) from a fishing country to the location of catch, calculated at a resolution of 0.25 degree and weighted by tonnes caught in each cell,<sup>225</sup> with greater distances indicating greater vulnerability.
- 3 / The percentage of harmful subsidies as a percentage of the total (2009) landed value of the fishery.<sup>226</sup> Harmful subsidies distort the market by, for instance, reducing

- fuel costs or increasing fishing capacity and thus support fishing even when it is uneconomical, with higher values indicating greater vulnerability.
- **4** / Per capita GDP based on purchasing power parity in 2016 US\$<sup>227</sup> as an indicator of relative national wealth with higher values indicating lower vulnerability.
- 5 / The value of the fishery per fisher (US\$) as an indicator of the average return to fishers within the sector. We averaged the value of reported industrial fisheries catch between 2005-2014<sup>228</sup> and divided this number by the estimated number of individuals employed in industrial fisheries in 2003 as more recent data were unavailable, with higher values indicating lower vulnerability.
- 6 / The percentage of unreported fish catch divided by the total of all catch, reported and unreported, for industrial fishing as an indicator of governance and effective fisheries management, with higher values indicating greater vulnerability.

These six characteristics reflect two major sets of drivers:

- » National Fisheries Policy that determines the degree to which fisheries focus on distant waters vs national EEZs and the degree to which countries subsidize their fisheries, a typical requirement of distant water fleets. This driver reflects the first three characteristics that drive vulnerability to forced labour.
- » Wealth and Institutional Capacity that determines the degree to which a country has the resources to maintain appropriate working conditions and report on fishing activity. This is reflected in national GDP, value of the fisheries, and the degree to which countries accurately report on their fish catch. This driver reflects the latter three characteristics that drive vulnerability to forced labour.

## Assessing vulnerability to modern slavery at sea

It is reasonable to assume that these six risk factors are relevant, not just for the top 20 fishing nations but for all fishing nations. In other words, an examination of these risk factors may point us to areas of risk that may otherwise be completely out of sight. To enable a broader examination of this issue, researchers at the University of Western Australia used the results from the analysis described above to model Risk of Modern Slavery at Sea for all fishing countries assessed in the Global Slavery Index 2016. The six risk factors identified can be explained in terms of two

dimensions which drive vulnerability to modern slavery in a country's fishing industry: first, National Fisheries Policy and second, Wealth and Institutional Capacity.

For each of the six characteristics identified in the initial analysis described above, a category was assigned to each country based on the country's value for that characteristic. For instance, where the percentage of fishing outside a country's EEZ was less than five percent, a value of "1" was assigned. For all six characteristics, vulnerability with respect to forced labour increases from "1" to "4".

TABLE 1
Parameters used to determine a country's rating for each of the six characteristics

		Category			
	FISHERY CHARACTERISTIC	1	2	3	4
1	Outside EEZ (%)	< 5%	5-29%	30-69%	> 70%
2	Distance to fishing grounds (km)	< 150	150-500	500-1300	> 1300
3	Harmful subsidies (%)	< 1%	1-5%	6-20%	> 20%
4	Per capita GDP (US\$)	> \$50,000	\$17,000-\$49,000	\$7,000-\$16,999	< \$7,000
5	Value per fisher (US\$)	> \$25,000	\$4,000-\$25,000	\$1,000-\$3,999	< \$1,000
6	Unreported catch (%)	0%	1-15%	16-40%	> 40%

These generated six categorical values for each country. We then took the average values of the three characteristics associated with National Fisheries Policy, and Wealth and Institutional Capacity. As the six characteristics have similar influence in the original analysis, their categorical values did not have to be weighted when calculating the average for each driver.

The average values for National Fisheries Policy, and Wealth and Institutional Capacity were then ranked from lowest to highest, representing low to high vulnerability respectively. Countries were assigned traffic light colours of green (< 2.00), orange (2.00 - 2.99) and red (3.00 - 4.00). These traffic lights represent low, moderate, and high vulnerability to forced labour in the global fishing sector. The results are in Table 1 of *Modern slavery in the fishing industry* section of this report.

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Trafficked brides of Haryana, India. Ghausia Khan, a survivor of bride trafficking, is a member of the district legal aid authority in Mewat, Haryana. Khan works for Empower People, an NGO that deals with trafficking cases and helps women in distress to find lawyers and provides them with legal information, and at times, monetary assistance. In this image, taken in March 2014, Khan shows photos of trafficked brides, which are known locally as Paro or Molki (means one who has a price). These are pejorative labels in Haryana, Punjab and western Uttar Pradesh. The women, after being promised marriage, find themselves in places like Mewat where traffickers sell them repeatedly to local men. Cut off from their native states, they are often confined and forced to work as bonded labour or pushed into forced marriage or sex work.

Photo credit: Subrata Biswas / Hindustan Times via Getty Images





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- Only two national surveys were undertaken in the Arab States, and none in the Gulf Cooperation Council (GCC) countries, despite the incidence of forced labour reported by different sources in such sectors as domestic work and construction in the GCC countries. The regional estimate for Arab States is therefore built mainly from respondents who were interviewed in countries outside the Arab States who reported about their forced labour situation while working in that region. Further, measurement of forced marriage among residents of countries within the region is particularly problematic where there are no surveys, and it was not possible to survey in countries that are experiencing profound and current conflict, notably in Syria, Iraq, Yemen, and Libya. Taken together, these gaps point to a significant underestimate of the extent of modern slavery in this region.
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- ILO Convention No.182 defines forced or compulsory recruitment of children for use in armed conflict as a worst form of child labour. The Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict prohibits all recruitment voluntary or compulsory of children under 18 years by armed forces and groups. The Rome Statute of the International Criminal Court makes it a war crime to conscript or enlist children under the age of 15 years or use them to participate actively in hostilities.
- While not exhaustive, the UN Trafficking Protocol specifically refers to the crime of trafficking a person for the purpose of removal of organs (Article 3 UN Trafficking Protocol). While not the only way that organ removal could become relevant to the broader topic of modern slavery, the term human trafficking for organ removal is a narrower concept that might

be colloquially referred to as "organ trafficking." This might encompass, for example, a whole range of illegal activities that aim to commercialise human organs and tissues for the purpose of transplantation, including transplant tourism, where patients travel abroad seeking an (illegal) transplant with a paid donor, and trafficking in organs, tissues and cells, which refers to commercial transactions with human body parts that have been removed from living or deceased persons.

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Estimates for the region are likely to significantly underestimate the scale of modern slavery due to substantial gaps in the available data.	In 2016, we reported 121 had criminalised trafficking, but this is not directly comparable to 2018. In 2017, we conducted a thorough review of our assessment of legislation and included more language experts in our review group. As a result of this, certain legislation was deemed not to meet the UN Trafficking Protocol due to requiring movement across borders or excluding the 'means' by which someone is trafficked from the definition. These countries were excluded from meeting this indicator in 2018.
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Breuker, R & van Gardingen, I, [Forthcoming], <i>Pervasive, Punitive, and Predetermined: Understanding</i> Modern Slavery in North Korea.	Commonwealth countries included are Antigua and Barbuda, Bahamas, Belize, Dominica, Fiji, Grenada, Kiribati, Malta, Nauru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, Seychelles, Solomon Islands, Tonga, Tuvalu, and Vanuatu. Palau (not a Commonwealth country) is also included for the first time, in an effort to ensure complete coverage of the Pacific.
One of the 50 respondents reported that they did not experience forced labour and that this was as a consequence of their employment as a teacher as well as falling within a high income bracket. The respondent reported that concessions are granted to teachers due to the well-regarded professional status.	ldentified using the 2016 Fragile States Index, where those countries that scored 10.0 on the Security Apparatus indicator were excluded. See http://fundforpeace.org/fsi/2016/06/27/fragile-states-index-2016-annual-report/.
In North Korea, being unemployed can lead quickly to being sent to a labour camp. To avoid this, it is critical to be registered with a job number. People without jobs register as so-called "8/3 workers," a term that is derived from an August 3, 1984 directive by Kim II Sung to recycle discarded materials to produce new products. Today it refers to employees who pay a steep monthly sum to an officially recognised workplace to be registered as an employee there, while working a different job (such as market trader) to earn the money to make a living and to pay their official employer.	Guide to Sustainable Purchases, <i>Decent Work</i> , [in Dutch].  Available from: http://gidsvoorduurzameaankopen.be/nl/sociale-aspecten/fatsoenlijk-werk. [29 May 2017].
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Regional Analysis	
As noted in the methodology (Appendix 2), the vulnerability model is based on data collected for a reference period ending on 15 April 2017.	International Labour Organization (ILO) & Walk Free Foundation 2017, Methodology: Global Estimates of Modern Slavery: Forced Labour and Forced Marriage, ILO, p.78. Available from: http://www.ilo.org/wcmsp5/groups/public/ed_norm/ipec/documents/publication/wcms_586127.pdf [31 January 2018]
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Seychelles was included in our assessment of government responses in 2018, however as this was the first year we collected data for this country we did not include its rating in the GSI. Data collected can be found in the database at https://www.globalslaveryindex.org/data/.	"Given the pervasive sexual violence that has marked this and previous military campaigns against the Rohingya in northern Rakhine State, the abduction of women and young girls raises serious concerns of rape and sexual slavery." Amnesty International 2018, <i>Myanmar: Fresh evidence of ongoing ethnic cleansing as military starves, abducts and robs Rohingya</i> , 7 February. Available from: https://www.amnesty.org/en/latest/news/2018/02/myanmar-fresh-evidence-of-ongoing-ethnic-cleansing-as-military-starves-abducts-robs-rohingya/. [1 March 2018]. See also: International Organization for Migration 2017, UN Migration Agency Warns of Trafficking, Labour Exploitation, Sexual Abuse of Rohingya Refugees, Press Release 14 November. Available from: https://www.iom.int/news/un-migration-agency-warns-trafficking-labour-exploitation-sexual-abuse-rohingya-refugees. [1 March 2018].
Antigua and Barbuda, Bahamas, Belize, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines were included in our assessment of government responses in 2018, however as this was the first year we collected data for these countries we did not include their ratings in the GSI. Data collected can be found in the database at https://www.globalslaveryindex.org/data/.	Fiji, Kiribati, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu were included in our assessment of government responses in 2018, however as this was the first year we collected data for these countries we did not include their ratings in the GSI. Data collected can be found in the database at https://www.globalslaveryindex.org/data/.
International Labour Organization (ILO) & Walk Free Foundation 2017, Methodology: Global Estimates of Modern Slavery: Forced Labour and Forced Marriage, ILO, p.78. Available from: http://www.ilo.org/wcmsp5/groups/public/ed_norm/ipec/documents/publication/wcms_586127.pdf [31 January 2018].	One of the few examples of a survey covering forced marriage-related topics is from Kyrgyzstan. According to findings of a survey undertaken in Kyrgyzstan, almost 4 percent of married women in the country reported having been kidnapped by their husbands without a

prior understanding. A separate question posed to all respondents in the same survey showed that a large majority of the population is somewhat or very worried that "a daughter / grand-daughter / sister will be kidnapped by someone for marriage (bride stealing)." These questions have also been included in a new ICVS-based survey in Kazakhstan, funded by the European Commission, to be conducted in 2017. See further: van Dijk, J 2016, 'Illuminating the Dark Figure of Crime: Crime Victimisation Surveys and Beyond,' Newsletter of the European Society of Criminology. Available from:

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- Malta was included in our assessment of government responses in 2018, however as this was the first year we collected data for this country we did not include its rating in the GSI. Data collected can be found in the database at https://www.globalslaveryindex.org/data/.

Thematic Chapter

- This list does not claim to be exhaustive. The data are taken from the BACI 2015 dataset (available from: http://www.cepii.fr/cepii/en/bdd\_modele/presentation.asp?id=1). For a detailed methodology of how these products were identified, please see Appendix 3. South Africa was excluded as it does not report trade data individually but only through the Southern African Customs Union, which comprises five countries of Southern Africa (South Africa, Botswana, Namibia, Lesotho, and Swaziland). The European Union was also excluded as much of its trade is already captured in the data of Germany, Italy, France, and the UK.
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131 For the purposes of this study, a fishing country is one that has any amount of reported fish catch caught by the industrial fishing sector between 2005 and 2014.

 $89.22\%,\,95\%$  CI [85.53%, 92.05%], we estimate that the population prevalence falls within the range of 855.3 persons per 1,000 population and

920.5 persons per 1,000 population.

140 A more detailed presentation of the results is available in the forthcoming report by Tulane University and the Walk Free Foundation.	148 Participants could report involvement in more than one form of hazardous work.
The criteria for determining child labour in this study differed from the ILO Resolution Concerning Statistics of Child Labour in that the present study did not include children aged 5 to 9 years of age, included a threshold of working hours for children below minimum age for employment (15 years of age), and did not count children of adults in forced labour as being in forced labour.	149 Child labour includes children working in hazardous conditions and children working more than the maximum allowable hours for their age, as deemed by the ILO.  150 0.42%, 95% CI [0.01%, 2.44%], we estimate that the population
International Labour Organization 2012, Hard to see, harder to count: Survey guidelines to estimate forced labour of adults and children, Geneva, pp. 17. Available from: http://ilo.org/global/topics/forced-labour/publications/WCMS_182096/lang-en/index.htm. [2 March 2018].	prevalence falls within the range of 0.1 persons per 1,000 population and 24.4 persons per 1,000 population.  151
	152 93.03%, 95% CI [88.26%, 95.95%], we estimate that the population prevalence falls within the range of 882.6 persons per 1,000 population and 959.5 persons per 1,000 population.
143 0.33%,95% CI [0.02%, 1.48%], we estimate that the population prevalence falls within the range of 0.2 persons per 1,000 population and 14.8 persons per 1,000 population.	153 86.24%, 95% CI [79.54%, 91.39%], we estimate that the population prevalence falls within the range of 795.4 persons per 1,000 population and 913.9 persons per 1,000 population.
144 0.15%, 95% CI [0.003%, 0.91%], we estimate that the population prevalence falls within the range of 0.3 persons per 1,000 population and 9.1 persons per 1,000 population.	154 Participants could report involvement in more than one form of hazardous work.
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39 from: http January 2	The World Bank n.d., Global Financial Inclusion Database. Available o://databank.worldbank.org/data/reports.aspx?source=1228. [12 2017].	48 Used by large international organizations such as the World Bank, the Organization for Economic Co-operation and Development (OECD), the Food and Agriculture Organization (FAO), and the International Labour Organization, the Gallup World Poll continually surveys in more than 160 countries, representing more than 99 percent of the world's adult population.
40 com/prod	Gallup, Inc. n.d., Gallup Analytics. Available from: http://www.gallup. lucts/170987/gallup-analytics.aspx. [10 February 2017].	The questionnaire is translated into the major languages of each country, and interviews are conducted by highly trained enumerators from
41	As above.	each country. All face-to-face interviews take place at a person's home, we can be defined as any dwelling with a cooking facility. A detailed description of the World Poll Methodology is available at: http://www.gallup.com/1786/gallup-world-poll-work.aspx.
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	The Institute for Economics and Peace 2016, Global Peace Index: ankings. Available from: http://www.visionofhumanity.org/#page/global-peace-index/2016. [12 January 2017].	The target population is the entire civilian, non-institutionalised population, aged 15 and older. Samples are probability-based and nationally representative and, with the only exception being areas that are scarcely populated or present a threat to the safety of interviewers.
44	As above.	
45 Statistics. 2017].	United Nations High Commissioner for Refugees n.d., Population Available from: http://popstats.unhcr.org/en/time_series. [10 February	51 Joudo Larsen J, & Diego-Rosell P 2017, 2017 Insight series: Using surveys to measure modern slavery, Walk Free Foundation. Available from: https://s3-ap-southeast-2.amazonaws.com/walkfreefoundation.org-assets/content/uploads/2017/12/01171017/02-Insight-Series-171201_FNL.pdf. [1 March 2018].
46 reported	The countries in which forced labour or forced marriage was to have occurred by survey respondents were: Afghanistan, Algeria,	

Analyses were conducted by Gallup Inc and Walk Free Foundation and are described in full in a forthcoming paper: Diego-Rosell P & Joudo Larsen J (Forthcoming). Modelling the risk of modern slavery.

For the remaining 20 countries where no GWP data was available, risk scores were imputed as an average over several multiple imputation approaches.	60 Six sets of projection sampling weights were computed to compensate for the different sample sizes available for each model. Each weight was computed by rebasing the original post-stratification individual weights on the base and extended samples so that the effective samples were projected to the adult population in each country.
All data was collected by Gallup Inc., with most surveys implemented through the Gallup World Poll (GWP), a global research project conducting nationally representative surveys annually since 2005 in more than 160 countries and more than 140 languages. In most of the developing world, GWP surveys are conducted using in-person interviewing and an area sampling frame design. In the developed world, random-digit-dialling or a nationally representative list of phone numbers is used, generally including	61 Log-Likelihood Full Model, Wald test, AIC, BIC, Pseudo R2, Nagelkerke R2, AUC (training), AUC (validation).
landline and mobile phones stratified by region. All surveys, either telephone	_
or face-to-face, are probability based and nationally representative of the resident non-institutionalize population aged 15 and older. See http://www.gallup.com/178667/gallup-world-poll-work.aspx for further methodological details.	62 Because our data deal with rare events that in a frequentist approach may lead to singularities in matrix inversions, we adopt a Bayesian approach. Besides the computational advantages, a Bayesian approach also allows us to incorporate basic prior knowledge about the prevalence and distribution of modern slavery. Independent weakly informative priors for model intercepts and regression coefficients, using a t density function with
	7 degrees of freedom and scale 2.5, based on recommendations from Liu
The working definition of forced marriage for this purpose deviates in one key aspect from the definition of forced marriage used in the Walk Free Foundation's Global Slavery Index (2016) and the International Labour Organization and Walk Free Foundation Global Estimates of Modern Slavery (2017). Our definition does not take into account whether the forced marriage	(2004) were assigned. Posterior predictive distributions are sampled using Hamiltonian MCMC, with 3 Markov chains and 1,000 iterations.
occurred in the five years preceding the survey or took place prior to the reference period but the victim reported their marital status as "married" during the reference period. The exclusion of these clauses is due to the limited sample size available for the stricter definition used by the International Labour Organization and the Walk Free Foundation (see "Statistical Methods" section).	63 via Stan (rstanarm package, see Gabry & Goodrich, 2016).
56 See Part A of this Appendix for a list of the variables from the Vulnerability Model.	64 The distinction between "opportunity" and "necessity" entrepreneurs is well-understood in the development community, and the Global Entrepreneurship Monitor (GEM) has found a preponderance of necessity entrepreneurs in developing countries. See further: https://tcdata360.worldbank.org/indicators/aps.ea.nec?country=ESP&indicator=3118&viz=line_chart&years=2001,2015
57 For example, variables regarding governance issues are not collected in countries such as China, the US and most of the countries in the MENA region, and so the inclusion of these variables in the model effectively explicited the population.	In order to compare the predictive accuracy of the different hierarchical Bayes models, we use leave-one-out cross-validation (LOO) to estimate pointwise out-of-sample prediction accuracy using the log-likelihood evaluated at the posterior simulations of the parameter values (Vehtari, Gelman, and Gabry, 2016).
excludes a large portion of the population.	
	66 See Diego-Rosell P & Joudo Larsen J (forthcoming). Modelling the risk of modern slavery.
As most variables in the Gallup World Poll are collected at the respondent level, the estimation approach is at the respondent level.	
	Bayes hierarchical linear model with weak priors, 7 demographic
	predictors, 6 "base" variables from the Gallup World Poll, one country-level predictor (Weighted Vulnerability Score), country-level random intercepts, and a cross-level interaction between currently owning a business and region

(South Asia vs rest).

59 All estimations take into account the multi-stage clustered nature of the sample, including the effect of sampling design in all variance

estimations using the Stata 'svy' package with linearization via Taylor series.

- 68 United Nations Office on Drugs and Crime (UNODC) 2016, Global Report on Trafficking in Persons, UNODC. Available from: https://www.unodc.org/documents/data-and-analysis/glotip/2016\_Global\_Report\_on\_Trafficking\_in\_Persons.pdf. [3 October 2017]. U.S. Department of State 2017, Trafficking in Persons report 2017. Available from: https://www.state.gov/j/tip/rls/tipprt/2017/. [3 October 2017]. ILO 2015, ILO Global estimates of migrant workers and migrant domestic workers: results and methodology, ILO. Available from: http://www.ilo.org/global/topics/labour-migration/publications/WCMS\_436343/lang-en/index.htm. [3 October 2017].
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- 78 Commonwealth countries included are Antigua and Barbuda, Bahamas, Belize, Dominica, Fiji, Grenada, Kiribati, Malta, Nauru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Samoa, Seychelles, Solomon Islands, Tonga, Tuvalu and Vanuatu. Palau, a non-Commonwealth country, is also included for the first time.
- 79 Identified using the 2016 Fragile States Index, where those countries that scored 10.0 on the Security Apparatus indicator were excluded. See http://fundforpeace.org/fsi/2016/06/27/fragile-states-index-2016-annual-report/.
- 80 English, Spanish, Italian, French, German, and Chinese. Portuguese and Arabic speakers were missing from the team this year. The team's background included law, international relations, international development, and American studies.
- Available at https://www.globalslaveryindex.org/data/.
- 82 M4 1.4.3 and M4 1.8.1 were weighted as one activity given the role that corruption and state-imposed forced labour plays in undermining a government response
- 83 As above
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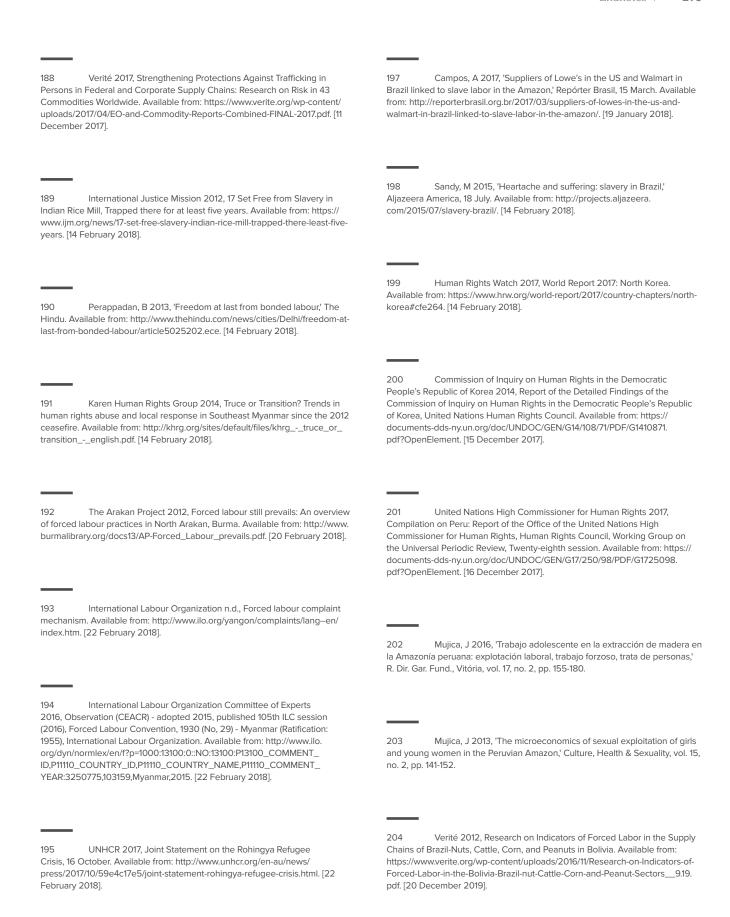
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Bamiyan Shelter Cares For Battered Afghan Women

Bamiyan, Afghanistan: Sakina sits on her bed with her son Shafiq, 18 months, at a women's shelter and safe house in Bamiyan, Afghanistan. Sakina spent 7 months in prison for leaving her first husand, a forced marriage, and then marrying another man. Shafiq was born in prison. Until women's shelters were started, something that was unknown here before 2003, a woman in an abusive marriage usually had no one to go to for protection. The problems many battered and abused women are confronting are deeply ingrained in a culture that has mainly been governed by tribal law. Since the overthrow of the Taliban in 2001, a more concrete idea of women's rights has begun to take hold, promoted by the newly created Ministry of Women's Affairs and a small community of women's advocates.

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