Modern slavery, environmental degradation and climate change: present and future pathways for addressing the nexus

Roundtable Report

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Report designed by Gill Williamson.

This event followed the Survivor Informed Spaces guidelines as produced by Survivor Alliance.1

If you have any enquiries about the findings of this report please contact: bethany.jackson1@nottingham.ac.uk

1 Survivor Alliance – Survivor Informed Spaces [https://static1.squarespace.com/static/5ee517995ce62276749898ed/t/5f215511b89d9b11a5cd4ad0/1596018976255/Survivor-Informed-Spaces-Resource.pdf]
Introduction

The modern slavery-environmental degradation-climate change nexus (Figure 1) has been gaining momentum as a research topic growing over the past decade, and being further fuelled by the advent of the UN Sustainable Development Goals (SDGs). Understanding of these connections has been developed in the literature with examples pulled from many sectors highlighting the presence of modern slavery in agriculture, forest ecosystems, polluting manufacturing settings and fisheries (Brown et al. 2019; Bales 2016; Brickell et al. 2018; Boyd et al. 2021; Tickler et al. 2018); as well as the implications of changing climatic conditions (Coelho 2016). The nexus combines the complex dual interactions between people and the environment in the case of modern slavery. These interactions have been identified as both enabling and constraining people’s risk of being subjected to modern slavery (Decker Sparks et al. 2021). The nexus is a global issue, and the risks faced by communities will only continue to grow as the effects of climate change continue to take their toll. Following the signatories to the Paris Agreement and its enforcement in 2016 to protect the planet from climate change, it is vital that social-ecological drivers linked to climatic variabilities are considered on the global agenda. Eradicating modern slavery within supply chains was included on the recent G7 summit agenda, and COP26 could be one such place to focus attention and actions around the wider social-ecological impacts of modern slavery beyond supply chains for international change.

Figure 1: Diagram of the modern slavery-environmental degradation-climate change nexus exploring the complexity of the impacts the nexus can have upon the environment and the resulting vulnerabilities that can be faced by communities because of these interactions. It is important to note that the nexus is both cyclical and bi-directional meaning that changes to the environmental can push people into situations where they may become vulnerable to modern slavery and vice versa. (Image credit: Jess Sparks, adapted by Bethany Jackson).
Whilst there is a growing body of work addressing these connections, there remain some challenges in terms of driving forward a truly transdisciplinary research agenda and evidence-based solutions at this nexus. Such challenges include:

- **Data**: Environmental data are often large-scale quantitative data that affect everyone living on the planet, which may be juxtaposed with worker-centric data, which can be qualitative, small-scale and related to very specific lives' experiences. How do we combine such data to provide interventions that equitably support people and nature? Moreover, how do we begin to share data? This sharing will be vital in understanding the drivers of the nexus and quantifying the links between modern slavery, environmental degradation and climate change. However, accounting for issues around privacy will be vital to ensure the protection of survivors, and communities that may face dangers from perpetrators of modern slavery, and those who wish to illegitimately benefit from findings.

- **Power dynamics**: The environmental implications of sectors have historically been the first to be noticed and addressed. Therefore, do stakeholders turn to environmental actors versus labour rights experts when working to address social issues? This is also linked to trust – who are viewed as trusted sources of knowledge, which groups and communities are being included? Such dynamics play a role in the inclusion and/or exclusion of worker voices, and the establishment of successful interventions. Further, power influences environmental and social impacts from sectors, but these underlying issues are often not addressed – even by environmental organisations – thus, systems transformation remains elusive. It is clear that creating meaningful change linked to the nexus requires a rebalancing of power.

- **Changing policy and engaging business**: Environmental and modern slavery legislation are currently disparate, whilst there are encouraging signs that human rights abuses and environmental crimes can be addressed with comparative importance and enforcement these are only beginning to occur. Further, to achieve change along supply chains these concerns need to be understood holistically by businesses and governments to protect people and the planet.

By balancing these dynamics, sharing expertise and working jointly to address the social-ecological implications of the modern slavery-environmental degradation-climate change nexus we can work to limit the risks of unintended consequences, and work to protect and ensure the rights of workers.

Antislavery researchers have called for their expertise to be centred and utilized by the environmental sector (Jackson and Decker Sparks 2020); it is encouraging that members from environmental organisations share this cooperative vision. Both sides are beginning to agree that there is a need and a benefit to further studying the nexus – where it has an impact, and how to develop partnerships between usually disparate groups. Some environmental organisations have explicitly noted the benefits to familiarizing themselves with antislavery experts, and identifying potential positive outcomes for corporate partnerships and conservation efforts when such engagement occurs. In order to achieve such cooperative action, it is vital that expertise are shared, and cooperation is established for both the good of people and the planet in mitigating the impacts of environmental degradation and climatic change driven by modern slavery (and vice versa).

The increasing complexity of the planet, the continued threat of climate change and hazards – including the increased likelihood of global pandemics such as COVID-19 – are only going to increase unless action is taken to address social-ecological issues, such as the nexus. The SDGs have outlined the connected nature of people and the environment, it is now for us to understand these connections and introduce interventions to end modern slavery, limit environmental degradation, and mitigate against climatic change.

By hope this roadmap, which outlines the conversations held during an event focused on the nexus (June 2021), can facilitate further thought and meaningful action regarding modern slavery and the connections to the environment and climate. It is paramount that our actions centre the rights of workers and communities, protect the environment, and facilitate shared cooperation, which cross boundaries of expertise, nations, and ecosystems in order to end modern slavery, protect the planet and mitigate against the impacts of climate change.

By Bethany Jackson, Nicole Tichenor Blackstone and Jess Sparks (30 June 2021)

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**Keynote speech – Professor Kevin Bales, Rights Lab**

The themes mentioned in the above introduction were also highlighted as part of Professor Kevin Bales’ keynote. Here the talk provided by Professor Bales is summarised.

Professor Bales set the scene by noting that all countries are affected by modern slavery. Slavery has always been part of global economies; what has changed is the cost of acquiring individuals subjected to modern slavery for labour, which has dramatically reduced as the global population has risen. This global population rise has itself resulted in significant changes in terms of levels of climate change and environmental degradation.

Modern slavery prevalence often correlates with levels of deforestation. Professor Bales provided examples of modern slavery across the globe taking place on areas of protected land and directly resulting in environmental degradation. The examples provided included the Sundarbans Reserve Forest in Bangladesh, which is the largest carbon sink in Asia, where child labour is used in fish processing (Jackson et al. 2020), and Brazil, where slave labour is used in charcoal production camps that supply the Brazilian steel industry (Bales 2016).

Professor Bales’ speech ended by suggesting potential solutions to address this modern slavery-environmental degradation-climate change nexus, including the use of carbon credits if linked to hiring those formerly subjected to modern slavery that destroyed forests and hiring them to replant forests (Bales and Savacool 2020). However, any potential development in regards to such plans should be designed by and led by former survivors of modern slavery and should not be tied to any reparations or support that they should be entitled to receive.
Lightning talks

Following the keynote presentation from Professor Bales, attendees heard a series of lightning talks focusing on four overarching themes. A summary of each of these presentations is provided below.

1. Modern slavery’s contribution to environmental and climate change

Dr Silvia Pinheiro – BRICS Policy Center

Dr Pinheiro highlighted recent data showing the advance of deforestation in the reserves and indigenous territories of Brazil due to illegal activities and climate change aggravated by the dismantling of the Brazilian environmental system. Reserves are areas of collective use by forest communities, and in the Legal Amazon, they are formed primarily by families of ex-tappers who escaped modern slavery in the last century. Although the National System on Conservation Units, launched in 2000, is an effective policy that resulted in 145 conservation units in the Legal Amazon, there is still a need to: address gaps in the subsistence-conservation balance; eliminate any possibility of slavery by strengthening Conservation Units’ policies; and preserve land-use rights and the collective use of land (Pinheiro et al. 2020).

2. Environmental and climatic change's contributions to modern slavery

Arianne Griffith – Global Witness

Ms Griffith began by noting that climate change is increasingly recognised as a human rights issue, with the impacts of climate change expected to have severe negative impacts on the realization of human rights globally. Ms Griffith outlined ongoing legislative efforts at the EU level to require businesses to address their negative human rights, environmental and climate impacts. Ms Griffith briefly explored key proposals for how such legislative responses should account for and address the modern slavery-environmental degradation-climate change nexus. Ms Griffith noted the importance of including both human rights and environmental impacts in legislation to regulate companies. See Global Witness (2021) policy briefing: Holding companies to account – a blueprint for European legislation.

Radoslaw Malinowski – HAART Kenya

Research conducted in the Samburu, Kilifi and Mander counties of Kenya, by HAART Kenya sought to answer the question: Does natural disaster, caused by climate change, increase vulnerability of the affected population to human trafficking? (Malinowski and Schulze 2017). The research established that the relationship between the two variables (drought and vulnerability to human trafficking) is complex. In some areas, drought increased vulnerability to human trafficking, while it reduced vulnerability in others. Populations whose vulnerability increased having been affected by drought must have experienced circumstances including: 1) being located in a specific socio-cultural setup such as remote area with no infrastructure, no alternative to husbandry and no government presence; 2) experiences of violent inter-ethnic conflict; or 3) exhibit a significant difference in quality of life before and after the drought. Mr Malinowski noted women and men were equally vulnerable to human trafficking, and displacement did not add to the vulnerability. On the contrary, members of affected communities who did not migrate were more vulnerable to trafficking than those who were displaced by the drought.

Sonia Mistry – Solidarity Center

Based on the Solidarity Center’s research (recently conducted in Bangladesh; Rashid 2020) and experience working with unions and worker organisations in over 60 countries, Ms Mistry highlighted the links between the impacts of climate change and environmental degradation on livelihoods, and the resulting socio-economic vulnerabilities that increase forced labour and trafficking risk. Worsening climate shocks – such as extreme weather events – without appropriate climate mitigation and adaptation interventions will force disproportionately impacted communities to seek alternative livelihood and survival options, including through unsafe channels. Ms Mistry’s proposed recommendations were linked to the overarching message that workers and their communities must have a meaningful say in driving climate solutions. Recommendations included: 1) climate adaptation planning and implementation must include sustainable decent work accessible to all, to promote greater community resilience from future climate related shocks; 2) climate mitigation efforts must ensure that the needs of impacted workers are met in the transition toward a green economy and that workers have access to decent work; and 3) all workers regardless of nationality immigration status, gender, race, ethnicity, etc., must be brought under full labour protections in line with core international labour standards.

Max Travers – Verité

Mr Travers discussed Verité’s case study research on large-scale banana plantations in Kachin State, Myanmar (Verité 2020); one of two case studies highlighted in Verité’s report series, Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation. This study focused on a sector, which is creating vulnerability for local communities and workers due to associated land grabbing, deforestation, and the unregulated use of pesticides. Verité’s research found several exploitative working conditions were present, some of which amounted to forced labour indicators. Evidence of worst forms of child labour were also found. The case study research represents an example of environmental degradation’s contribution to forced labour and other forms of labour exploitation.
3. Predicting, identifying and balancing the synergies and trade-offs between coupled ecological-labour risks in supply chains – with an emphasis on solutions

Natasha Mahendran – Earthworm Foundation
Ms Mahendran used the example of the palm oil industry to explain how companies face pressure to “prove” their supply chains are free from exploitation and environmental degradation. In some supply chains, consumer pressure and public awareness focus more, or only on, one type of risk, resulting in corporations focusing solely on this issue to the detriment of others. Ms Mahendran discussed the complexities of the on-the-ground realities, where various supply chain actors and surrounding communities cannot easily be categorised as heroes or villains. In fact, these actors (buyers, producers, farmers, workers, community members) have the potential for both positive and negative impacts on the environment and decent work outcomes. Ms Mahendran raised the necessity of: 1) including community voices to be able to prioritize issues for engagement along supply chains; 2) investing in tools, resources, capacity building and training (for example translating international standards into simple documents companies can adopt, and ethical recruitment) (Earthworm Foundation 2019, 2020); and 3) having an industry-wide transformation mind-set, rather than focusing on a single idea or project.

4. Promising, evidence-based interventions focused on the nexus

Swetha Kolluri – UNDP Accelerator Lab India
Ms Kolluri provided an overview of the work UNDP is undertaking in partnership with the Rights Lab through their ‘Slavery from Space’ programme, which is applying the novel approach of using geospatial technologies and machine learning (ML) to detect and classify brick kilns (known to be sites where myriad social-ecological challenges intersect) using satellite data (Kolluri et al. 2020). Ms Kolluri noted that co-designing projects with a diverse group of stakeholders (NGOs, citizen groups, government agencies and others) improves the application value, and discussed the advantages and limitations of using ML.

Fran Witt – Anti-Slavery International
Ms Witt noted that COP26 is an important test of the Paris Agreement and an opportunity for governments to raise their ambition in response to the climate crisis (Witt 2021); and raised these concerns following Anti-Slavery International’s recent work around the nexus (O’Connell 2021). It is also an opportunity for the modern antislavery movement to add its voice to civil society globally: demanding that fossil fuels remain in the ground and that governments commit financially to increase the adaptive capacity of people vulnerable to the impact of climate change. The concept of a ‘just transition’ is embodied in the Paris Agreement. Tackling modern slavery involves ensuring people are provided with decent work and secure forms of employment that are regulated and have safeguards.

Roadmaps for present and future research

Participants were placed into one of three breakout sessions. The following provides an outline of the outcome of those discussions used to produce the overall roadmap for those investigating the nexus; complete with additional information and references provided by the Rights Lab’s Ecosystems and the Environment Programme. These discussions were split into three separate themes based on identified gaps and areas where future collaboration and cooperation between the antislavery and environmental organisations may occur. A series of prompt questions — specific to each theme were asked by the facilitator to the group (see Annex III). By outlining these findings from conversations during the roundtable, we believe that there is the opportunity for greater collaboration, sharing of resources, implementing change to policy, and encouraging businesses to take greater control and inspection over their supply chains.

Data gaps and needs
Data gaps and needs were considered differently depending on the stakeholders. Addressing such differences is necessary when tackling the nexus.

Data availability
There are plenty of data available to inform action. This is a misnomer, which may be relevant to address environmental degradation but not to address modern slavery.

Environmental organisations have a view that there are plenty of data available, however this is juxtaposed with the position and reality faced by the antislavery sector. Modern slavery data are difficult to capture and are limited in many countries due to a lack of data collection and the hidden often illegal nature of the modern slavery.

Aligning the viewpoints and realities of data availability between environmental and antislavery organisations is necessary at the beginning of planned interventions, to ensure that issues linked to the nexus are addressed equally, and aim to address any biases in data.

Further, antislavery experts note that we are missing data on the social and psychological drivers and consequences of climate change and modern slavery.

Consideration of data from other social impacts may be required to address issues of modern slavery when assessing the nexus.

Big Data
Reliance on big data is common in the environmental sector, and yet more data are required for monitoring systems that incorporate modern slavery. Such global systems are currently unavailable in the antislavery/anti-trafficking space. However, there have been calls previously for the establishment of such systems (Delta 8.7 2019; Jackson 2020).
There has been significant progress in earth observation but no real investment in monitoring beneath the tree cover, especially in national forests around the equator. There are examples of using mobile phones to make sound recordings to pin point chainsaws (as an early warning system to prevent further deforestation) but expansion of data collection at the local, granular ground-level is needed that would identify cases of modern slavery.

We lack ‘ground-truthing’ data. We have advancements in Artificial Intelligence (AI) and cloud computing and the resources to run massive algorithms but do not have the ground validation data. Human mobility data has the potential to create real value to analytics, likewise telco data, but this is not easily available across the entire world.

**Establishing commonalities**

We need to align and establish common ground as to what data can be shared, how these data can be shared, and why there may be disparities between data collection for the three components of the nexus.

Careful consideration is required to challenge the notions of data as ‘open-source’ and ‘open access’, particularly when this data includes personal information. Antislavery and environmental researchers need to balance the tensions between ensuring equity of data, and making these data useful whilst protecting privacy.

Equitable access to data, data collection methods, and resources need to be made available globally. Researchers and organisations working to address the nexus should avoid “parachuting” into locations, and instead work with – and be led by – communities that have been directly impacted by the threats noted in the modern slavery-environmental degradation-climate change nexus.

**Stakeholder access and usage**

It is necessary to improve the ability of stakeholders to use data, process it, analyse it and turn it into intelligence, and subsequently use this intelligence to inform action. This will eventually increase the overarching cooperation of stakeholders, including environmental NGOs, antislavery organisations, community organisations, governmental actors (at the local, national and international level), conservation actors, certification boards, businesses and consumers, amongst others.

Scholars need to translate data for different actors working in different disciplines so they can make use of it. This may include the need to integrate multiple sources and types of data for policy actors to support them in making better evidence-informed decisions.

Further, better tools and training need to be provided to Conservation Units and Labour Inspectors as such communities are aware of social-ecological issues within their local areas. With additional support, they can better defend the land, and those reliant upon it.

**Business engagement**

To engage successfully with businesses and implement meaningful monitoring along their supply chains, it is necessary to work with these stakeholders and their constituent parts.

We should aim to track links between profits of companies that are linked to and responsible for deforestation and modern slavery.

Consumers should also be made aware of the connections associated with the nexus. Our current capitalist system pushes consumers toward the lowest cost option despite the resulting negative externalities and therefore consumers need to be engaged as a key stakeholder group.

**Identifying levers for change**

Several areas of policy were identified by stakeholders, yet it was clear that vast improvements are necessary in order to enact meaningful interventions and responses related to the nexus.

**Due diligence**

Due diligence frameworks and legislation were viewed as essential methods of ensuring businesses and governments worked towards equal redress for people and the planet concerning the modern slavery-environmental degradation-climate change nexus. The EU’s new mandatory Human Rights and Environmental Due Diligence (mHREDD) legislation was cited as having potential, but further suggestions were noted.

It is vital that the importance of a worker-driven approach to due diligence is integrated. Workers need to be involved in the design, operation and monitoring processes of grievances mechanisms to ensure that remedies work in favour of victims.

For those involved in the antislavery community, the inclusion of access to remedy – including remuneration – within policy moving forward was an essential requirement.

Mandatory human rights due diligence reporting is promising but there needs to be more emphasis on remedy and having offenders rebuild the environment and communities that their actions have affected.

A mechanism for remedy needs to be attached to mHREDD, alongside a mechanism for legal liability so companies are held accountable for the harms caused. In essence, there needs to be consequences, rather than just guidelines. This will vary across geographies, as the US Supreme Court recently made such accountability for US businesses more difficult (CCR 2021).

Frameworks around due diligence also need to directly address corporate actions linked to modern slavery and environmental degradation within supply chains.

It is crucial that we reconcile current corporate social responsibility (CSR) frameworks with human rights and environmental frameworks. One specific area that deserves attention is the financial sector – it is important that financial regulations impose penalties on institutions that do not carry out environmental and human rights due diligence.

Finally, efforts to strengthen the monitoring systems need to be put in place rather than relying on inaccurate data that can be used to mask supply chain issues.

**Identifying institutions of change**

Policy change should be targeted more broadly than just within governmental structures. Other forms of legislative and governmental bodies who have influence on the protection of the environment, and achieving the SDGs, should be approached.
Multi-lateral development banks (for example World Bank and IMF), and regional development banks should be engaged in addressing the nexus. They incentivise and support infrastructure projects, for example, and it is unclear whether sufficient attention has been paid to their due diligence requirements in relation to modern slavery.

Further, regional and bilateral trade agreements must include negotiations on the process of production, with a specific focus on workers’ health and working conditions.

Such considerations reflect recent calls for the development community to be engaged in addressing modern slavery (Cockayne 2021) and could be expanded upon to address the nexus as a whole.

**Intervention and remediation**

Actors addressing policy should be working toward the intervention of modern slavery and environmental degradation, rather than solely addressing remediation. These considerations should also be incorporated more broadly where climate change impacts are likely to occur.

Due diligence proposals in the mHREDD being put forward by the EU currently emphasise the preventative elements over those of remediation alone. We need to account for this in all legislation and in our policy responses.

An emphasis on prevention is common in both the environmental and antislavery sectors; interventions in areas of potential vulnerability to the nexus should be identified and included in the priorities of legislative change, alongside locations where impacts may already be arising.

Details of how the law should be shaped from those in both the environmental and antislavery sectors have recently been highlighted see Global Witness (2021) and Anti-Slavery International (2021).

Human trafficking and modern slavery should be considered as part of the humanitarian response to natural hazards. Integration within humanitarian response guidance and frameworks could help mitigate additional vulnerabilities communities may face following climatic variability. These can be tailored to address both short- and long-term onset impacts.

**Pathways for the uptake of antislavery efforts into wider supply chain strategies**

Business engagement will be required in order to address the nexus. In order to generate change within supply chains, stakeholders noted a number of requirements.

**Beyond certification and audits**

Movement beyond certification and auditing supply chains alone is required in order to increase traceability and enact sustainable changes, which support people and the environment across supply chains.

Audits are especially ineffective in raw materials supply chains. For example, if extractive practices are connected to illegal activities in protected areas where it is difficult to gain access on the ground (for example, deforestation due to business activities in protected areas), audits can only form part of the solution. Audits need to be accompanied by robust grievance mechanisms and access to remedies.

Businesses need to understand that audits alone are not going to be enough due to their limitations.

**Over-reliance on data alone**

Data are important to move businesses toward encompassing human rights and environmental protections within their supply chains. However, there needs to be movement away from the default position of requiring data, toward businesses taking the initiative before instances of the nexus are located in their supply chains.

Data are not enough. A significant amount of pressure is needed to encourage businesses towards action. However, we must be cognizant that environmental and human rights regulations/policies may not naturally integrate in corporate frameworks/regulations. We therefore need to target specific regulations that would be mutually beneficial to all such areas.

Coalitions of organisations to jointly address the nexus should be identified. However, in some sectors, there are a few big actors at each stage of the supply chain who control a significant portion of the market, and therefore there are fewer actors to bring to the table. This may be either a barrier or a benefit, depending on the orientation of those actors.

If organisations are involved in corporate partnerships that focus explicitly on one issue or the other (for example, environmental issues or human rights issues) there’s an opportunity to ‘nudge’ the corporate partner into awareness about the related issue.

The benefit of different areas (environmental, human rights and others) coming together to work on issues is that it might result in the presentation of solutions in a way that attracts funding, and the emergence of novel approaches which may help capture the attention of the right stakeholders.

In sectors where monopolisation is common, we need to address whether one large trader can be tied to change, such that their involvement provides significant coverage of the vulnerable populations and important ecological sites. This will be vital for implementing effective change, and without, such change may be limited.

It is important that we invest in data and visualisation of issues, but also invest in the transformation of issues. There is pressure on companies regarding traceability (primarily of human rights issues) but less effort is put into dealing with additional issues encountered along the supply chain. Funding for traceability efforts need to be balanced with investment in practical support to address the issues that are identified.

**Holistic approaches**

Movement away from ‘hotspot’ focuses are required – this concept skews efforts to tackle the nexus, and enables issues in other geographies to be ignored. For example, there is a tendency to focus on specific countries and regions (for example, focus on seafood in Thailand; and on the DRC and surrounding countries for mining). In the countries and regions that are not researched, the issues tend to be go unaddressed. Thus, resources are funnelled into one area, where other areas may equally benefit from such resources.

Therefore, we need to take a more holistic approach and understand the absence of data does not equal the absence of risk.”
Overarching roadmap recommendations

In order to embed action to tackle the modern slavery-environmental degradation-climate change nexus there are several key steps that need to be undertaken by the community addressing environmental illegality and modern slavery abuses. These steps are interconnected and should be considered as a cycle that should be repeated as we develop further understanding of the myriad connections contained within the nexus (see Figure 2).

Figure 2: Concept for the roadmap. It should be viewed as an ongoing, iterative process that is the baseline for work between antislavery and environmental actors working to address the modern slavery-environmental degradation-climate change nexus.

The community tackling the nexus should work towards the common goals of: 1) improving data availability, understanding, and sharing between disparate groups; 2) use these findings to inform policy change to support enforcement of laws to protect the environment and those subjected to modern slavery; and finally, 3) use both these data and policy change to encourage change within business supply chains, increasing transparency, monitoring and protections for the ecosystems and workers in the supply chain.

A number of key recommendations along the roadmap that antislavery and environmental organisations should consider moving forward are explored in detail below and within Figure 3 in a summary of the roadmap. It is however clear that data are vital to enact policy change, which is in turn necessary to encourage businesses to take meaningful action along their whole supply chain.

Roadmap in summary

<table>
<thead>
<tr>
<th>Opportunities for combining expertise</th>
<th>Warnings/risks</th>
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<tr>
<td>Establish common ground between antislavery organisations and experts.</td>
<td>Must equally address the nexus, reliance on monitoring in the environmental space combined with lack of modern slavery data could lead to over-monitoring of ecological, and ignore social, impacts.</td>
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<tr>
<td>Develop effective monitoring systems – that work to address environmental degradation, climate change, and include modern slavery.</td>
<td>Variations required between stakeholders – what is useful for the environmental sector may need to be altered for the antislavery community and vice versa. This will also apply to policy actors, survivor engagement, and business engagement etc.</td>
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<tr>
<td>Support local communities and workers – engage with them as expert leaders in the field.</td>
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<tr>
<td>Translation of data into useful resources.</td>
<td>Collective consultancy between antislavery and environmental organisations is required so that the legislation addresses both equally, and human rights do not compete with environmental protections.</td>
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<tr>
<td>Focus on preventative measures, rather than solely reactive strategies, moving forward.</td>
<td>Must include collaborative engagement with local communities for their local expert knowledge.</td>
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<td>Engagement with due diligence legislation – must include remedy and remuneration at the heart for survivor of modern slavery and communities impacted by environmental degradations.</td>
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<td>Targeting of the development and financial community – actors from both sides can target relevant funding and support opportunities for targeted action that may not be available to the other sector.</td>
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<td>Centring of worker voices in the design, implementation and monitoring of interventions and policy changes.</td>
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<td>Increase pressure on businesses to take action beyond tier-one suppliers.</td>
<td>Groups must work together to move beyond a singular sector focus, but this must include expertise from the relevant sectors and experts to address the issues that are present.</td>
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<td>Holistically address the nexus across sectors – moving away from a ‘hotspot’ approach that has overly focused on single sectors to one that encompasses multiple geographies, sectors and timescales.</td>
<td>In order to avoid moving modern slavery into other sectors and locations unwittingly by addressing environmental degradation, expertise should be engaged equally from both antislavery and environmental organisations.</td>
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<td>Engagement with relevant expertise, rather than relying on the environmental sector alone. If labour exploitation is occurring in a supply chain alongside environmental degradation it is vital that engagement with both sides is undertaken.</td>
<td>Modern slavery should not just be included in certification requirements, and inspections should be undertaken by relevant authorities. Liability and actionable redress is required in legislation to enforce compliance beyond voluntary standards and frameworks.</td>
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<td>Movement beyond certification and audits as they are currently relied upon as a sole mechanism to tackle environmental degradation or labour exploitation by some companies.</td>
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Figure 3: Summary of the key integration and collaboration points between the antislavery and environmental community in order to address co-occurring issues related to the modern slavery-environmental degradation-climate change nexus. Note there are a number of concerns and considerations that need to be understood and accounted for in order to limit the potential of negative outcomes occurring.
Roadmap in detail

Data
1. Establishing a common ground – the environment and antislavery communities need to build partnerships that facilitate conversations related to the varying degrees of data availability, and the varying scales of the available data, in the environmental and antislavery fields.
2. Development of monitoring systems that account for the modern slavery as being both a driver of environmental degradation and climate change, and of modern slavery being a result. This will involve the quantification of the nexus, moving beyond those assessments of co-occurrence that have been useful so far. Yet in order to move toward such quantification, more data from the antislavery community are needed, and understanding of current data limitations in the antislavery field are beyond those assessments of co-occurrence that have been useful so far. Yet in order to move toward such quantification, more data from the antislavery community are needed, and understanding of current data limitations in the antislavery field are required from the environmental sector.
3. Work to collect data should support the opportunities of workers and local communities; this is via the provision of tools, which are developed as part of research projects, and training opportunities to support data collection and intervention implementation. This should be an ongoing aim of the movement. Survivors of modern slavery, communities who have been impacted by environmental degradation and climatic change, and workers should be centred moving forward.
4. Translation of data and findings to create useful resources for implementing antislavery and ecological interventions, as well as influencing policy and altering the actions businesses undertake to investigate their supply chains.

Policy
5. Due diligence frameworks need to be strengthened with the inclusion of liability (for example, financial and legal penalties) for those who do not maintain social-ecological protections. Further, remedy and remuneration should be included within due diligence legislation as a means of providing support to those who may have been impacted by situations of modern slavery and/or environmental degradation and climate change. This should be included in the development of legislation such as the EU’s mHREDD; and other forms of legislation, which equally work to address environmental and social impacts. The formation of such legislation should be a target of those investigating the nexus, to generate political capital to support nature and workers.
6. Interventions put in place should move toward preventative focused measures to tackle the potential drivers of the nexus before they occur, as well as those interventions associated with responding to impacts of the nexus. Movement toward such a preventative model should take place over time and be integrated along various stages of the nexus (such as, before and during phases of climatic change, post-intervention among others).
7. Policy changes linked to the nexus should jointly target the development and finance community on which businesses rely in order to fund interventions and lead to improvements in supply chain transparency. Including compliance with legislation as a component of funding eligibility and receipt may improve compliance.
8. Centring of worker voices, implementing worker-driven approaches and engaging local communities impacted by environmental and climatic change should be included in the development of any legislation or intervention, which aims to address the nexus. This will include incorporation into corporate frameworks, and human rights and environmental frameworks. Expertise from those with direct experience (for example, environmental defenders, survivors of modern slavery, workers groups) should be at the heart of the environment and antislavery community’s actions moving forward.

Business supply chains
9. Those working to address the nexus should increase pressure on businesses to take action to address issues beyond the first-tier of their supply chains. This should be led by those developments noted in the policy section, and linked to the support businesses can receive from investors, development banks, and from wider society. Businesses should see their role in tackling the nexus as far-reaching but businesses should work toward full traceability and accountability in their supply chains, and finance financial and legal consequences should they not engage with such processes.
10. Holistically addressing the nexus across sectors is necessary. Currently sectors and supply chains appear siloed as efforts to address the nexus focus on specific companies, sectors, and geographic regions. A refocusing of efforts to investigate supply chains across sectors is required so that issues associated with the nexus are not ignored in other geographic regions, as there is intense focus on one region.
11. Businesses should be targeted to refocus their initiatives to support ending modern slavery and environmental degradation. In order to achieve this, businesses need to be engaged as a key stakeholder; and businesses should be steered towards engaging with relevant expertise – where in the past they may have relied on environmental organisations only. The establishment of such connections between antislavery and environmental actors will be vital in order to mitigate issues which may be faced should businesses not refocus their efforts to jointly tackle social-ecological impacts when they occur.
12. Movement beyond certification and audits is needed. They should be used as a baseline measure and supported with active investigation and worker-centred monitoring in conjunction with environment and antislavery experts.
Conclusion

There is a clear willingness between those working on the modern slavery-environmental degradation-climate change nexus to increase engagement and capacity between those in the antislavery community and those from environmental organisations. As these partnerships and collaborative efforts coalesce moving forward, workers voices must be centred in the conversations, and environmental defenders, survivors of modern slavery and workers must take a leading role in the interventions put in place. As a community, we must widen our approach to assess sectors holistically, and address social-ecological impacts before they occur. It is clear that whilst there is good work being undertaken, many researchers assessing the nexus believe that their work is focused on the environmental and climatic impact on modern slavery. Moving forward, those addressing the nexus should consider how their work actively intersects with modern slavery acting as the driver, and how connections to policy and supply chains may be identified. Without such a step, it is unlikely that the interconnected SDGs associated with the nexus and target 8.7 (end modern slavery) are likely to be achieved.

The expertise that antislavery researchers and local experts can provide to areas where the nexus may be occurring – and in which environmental organisations may be operating – should be at the forefront of all working to provide successful interventions. Shared knowledge, facilitation of partnerships, and engagement with the relevant expertise are likely to reduce the risks of shifting modern slavery and environmental degradation into other localities. By working in conjunction with one another, interventions are likely to be more successful, and the damage to both people and nature, reduced.

The roadmap should be viewed as a guidance mechanism for the ideal ways that the environmental and antislavery communities should engage with one another in order to best gather data, support policy change, and strengthen compliance within supply chains. Based on the conversations at the roundtable, there is a clear appetite for mutual engagement and shared expertise. This is encouraging and vital as we move to quantify the nexus globally.

References


Annex I: Event details for roundtable on modern slavery, environmental degradation and climate change – Rights Lab, Delta 8.7 and WWF

Agenda

Introductions

Alice Eckstein – Project Director for the Modern Slavery Programme at UNU-CPR - Delta 8.7

Corey L Norton – Vice President in Supply Chain Legality, Markets Institute WWF

Dr Jess Sparks – Associate Director of the Rights Lab Ecosystems and the Environment Programme, Rights Lab

Keynote speech

Professor Kevin Bales, Research Director – Rights Lab, University of Nottingham

Lightning talks

Theme 1: Modern slavery's contribution to environmental and climate change
Dr Silvia Pinheiro – BRICS Policy Center

Theme 2: Environmental and climatic change's contributions to modern slavery
Arienne Griffith – Global Witness

Radoslaw Malinowski – HAART Kenya

Sonia Mistry – Solidarity Center

Max Travers – Verité

Theme 3: Predicting, identifying and balancing the synergies and trade-offs between coupled ecological-labour risks in supply chains (for example, forestry, agriculture, fishing, mining, brick-making) – with a possible emphasis on solutions.
Natasha Mahendran – Earthworm Foundation

Theme 4: Promising, evidence-based interventions focused on the nexus
Swetha Kolluri – UNDP Accelerator Lab India

Fran Witt – Anti-Slavery International

Breakout sessions

Session 1: Data gaps and needs

Session 2: Identifying levers of change

Session 3: Pathways for the uptake of antislavery efforts into wider supply chain strategies

Summary and next steps
Annex II: Speaker bios

**Professor Kevin Bales – Rights Lab, University of Nottingham**
Professor Kevin Bales is a leading scholar in contemporary slavery. Kevin was the co-founder of the NGO Free the Slaves, and currently serves as the Rights Lab Research Director, on the Board of Directors for the Freedom Fund, and a member of the Global Slavery Index Expert Working Group. He has won several awards, written a number of leading books on modern slavery, produced toolkits for the UN, and was the lead author of two editions of the Global Slavery Index (Walk Free Minderoo Foundation). In 2016 he wrote the book *Blood and Earth: Modern Slavery, Ecocide and the Secret to Saving the World*, which explored themes of the nexus. He gained his PhD at the London School of Economics.

**Sonia Mistry – Solidarity Center**
Sonia Mistry is the Global Lead on Climate Change and Just Transition at the Solidarity Center, the largest US-based international worker rights organization. She joined the Solidarity Center in 2007, supporting worker rights and union building programs throughout sub-Saharan Africa and Asia, including programs focused onpromoting the rights of migrant workers, informal economy workers, and workers in global supply chains. In 2018, Sonia became a founding co-chair of the organization’s Climate and Labor Justice Working Group. Sonia holds a Master’s of International Affairs from Columbia University’s School of International and Public Affairs, and a bachelor’s degree from Mount Holyoke College with a major in Anthropology.

**Dr Silvia Pinheiro – BRICS Policy Center**
Dr Silvia Pinheiro is a lawyer and professor with PhD in International Trade Law. She is the Coordinator of the Modern Slavery Research Center at the BRICS Policy Center – Pontifical Catholic University of Rio de Janeiro, Brazil. She was the PI on the project ‘Inclusion of Amazonian community enterprises into multinationals corporations value chains - mechanisms, partnerships and impacts’ (Newton Fund Advanced Scholarship), and is a consultant for the project ‘Visualizing and enhancing Socio biodiversity Value Chains in the Amazon: realizing impact and promoting partnerships’ (Newton Duns Impact Scheme).

**Arianne Griffith – Global Witness**
Arianne Griffith is a Senior Campaigner on Corporate Accountability at Global Witness where she leads on research and policy for the EU corporate accountability campaign. Arianne is an attorney and researcher who has published in the areas of public international law and business and human rights. Prior to joining Global Witness focused on improving business responses to modern slavery in supply chains at the Rights Lab. Arianne holds a Master of Laws degree in International Law from University College London (UCL) and completed her undergraduate law degree at the University of the West Indies.

**Radoslaw Malinowski – HAART Kenya**
Radoslaw Malinowski founded HAART Kenya, a non-governmental organization working against human trafficking in Kenya in 2010. Radoslaw holds a law degree from the Catholic University of Lublin and is currently pursuing his PhD. He has lived in Kenya since 2007. He is a lecturer at Tangaza University (Nairobi), consultant to the International Peace Support Training Centre (AU) and author of several briefs and manuals on human trafficking and irregular migration in relation to security and human rights.

**Max Travers – Verité**
Max Travers currently serves as the Program Manager in the Research and Policy Program at Verité, a labor rights NGO based in the United States. He was the Lead Researcher on the report *Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation*, researching forced labor in the agricultural and forestry sectors of Myanmar. Max specializes in implementing labor rights risk assessments at the country, sectoral, and supply chain levels. Current projects include Promoting Worker Rights in the India-Gulf Corridor and Evidence to Action: Increasing the Impact of Research to Mobilize Efforts Against Forced Labor in Mauritius and Argentina. He holds an MA in Public Administration (Clark University) and a DA in International Development and Social Change.

**Natasha Mahendran – Earthworm Foundation**
Natasha Mahendran leads the Earthworm Foundation’s Respect for workers’ program in Malaysia, overseeing projects on forced labour, child labour and responsible recruitment in commodity supply chains. Prior to joining Earthworm, Natasha has worked with and consulted for various non-profit and international organisations in Australia, Asia, the Middle East and Europe, in the field of labour rights, migration and rights based development. Natasha has a Master’s in International Affairs from the Graduate Institute of International & Development Studies in Geneva, Switzerland; and a Bachelor of Arts (Languages) from the University of Sydney, Australia.

**Swetha Kolluri – UNDP Accelerator Lab, India**
Swetha Kolluri is a Data Scientist and Rural Development professional from India. Her work encompasses diverse fields like sustainable agriculture, poverty alleviation, climate change and digital technologies. As part of her role as Head of Experimentation at UNDP she leads the design of interventions, and undertakes evaluations to support a range of SDG targets. Swetha is a Fulbright-Nehru scholar and graduate from Yale University. She is also an Electronics Engineer from JNTU Hyderabad and graduate from the Institute of Rural Management Anand (IRMA).

**Fran Witt – Anti-Slavery International**
Fran Witt has over 30 years international development experience, with an emphasis on climate justice, economic justice, development finance and international human rights; and currently leads Anti-Slavery International’s Climate Change and Modern Slavery strategy. Previously Fran worked with international partners and coalitions to influence the UNFCCC climate negotiations, including COP21 in Paris. She holds an MSc in Violence, Conflict and Development from SOAS, University of London, and is a fluent Spanish speaker.
Annex III: Breakout session prompts

Prompts used by each facilitator in the breakout session were as noted below. An additional question may be posed if there was time during the session.

Data gaps and needs

- What data gaps are currently present in the work (what have been the implications), what changes and data are needed to address the nexus?
- Which stakeholders need to be engaged in order to close these gaps and develop understanding of the nexus?

Additional question

- Methodologies being applied to collect data, strengths/weaknesses, how do these methods increase collaboration?

Identifying levers of change

- What areas of policy need to be altered to best execute changes to support social-ecological protections? (related to modern slavery, environmental degradation and climate change)
- Where should antislavery and environmental organisations work together for meaningful change? (for example, which sectors, what legislative level, meaningful requirements are needed, approaches and repercussions)

Additional question

- What type of policy change/framework would you like to see and how do you think we should implement co-designed social-ecological interventions/recommendations?

Pathways for the uptake of antislavery efforts into wider supply chain strategies

- What do businesses require (data, awareness, will-power, connections) to address the nexus with an equal focus on both social and ecological risks in their supply chains?
- What mechanisms would be suitable for businesses to incorporate data points and information on the modern slavery and the environment equally into their corporate strategy? Perhaps it would be pre-competitive collaborations, a set of guidelines or standards, a set of indicators (like science-based targets), or something else.

Additional question

- What form of legislation/policy would be key for business engagement?

About the organisers

Rights Lab

The Rights Lab is the world’s largest and leading group of modern slavery researchers. Through our five main research programmes, on Data, Communities, Law, Ecosystems, and Business, we deliver new and cutting-edge research that provides rigorous data, evidence and discoveries for the anti-slavery effort. Our team leads for stakeholder impact and engagement work across all five programmes to translate research findings for key stakeholders. Our InSPIRe project (Involving Survivors of Slavery in Policy & Intervention Research), run in partnership with Survivor Alliance, works across our five research programmes to ensure our research is survivor-informed. More information is available on our website: nottingham.ac.uk/rights-lab

Delta 8.7 (UNU-CPR)

Delta 8.7 (delta87.org), based at the United Nations University Centre for Policy Research (UNU-CPR) in New York City, is the Alliance 8.7 Knowledge Platform exploring what works to eradicate forced labour, modern slavery, human trafficking and child labour, an aim set out in Target 8.7 of the UN Sustainable Development Goals. The project uses data visualizations to track prevalence and progress over time, and collaborates with academics, policy makers, survivor leaders and front-line responders to translate research into policy impact.

World Wildlife Fund

For 60 years, WWF has been protecting the future of nature. One of the world’s leading conservation organizations, WWF works in nearly 100 countries and is supported by more than one million members in the United States and more than five million globally. WWF is dedicated to delivering science-based solutions to preserve the diversity and abundance of life on Earth, halt the degradation of the environment and combat the climate crisis. WWF’s unique way of working combines global reach with a foundation in science, involves action at every level from local to global, and ensures the delivery of innovative solutions that meet the needs of both people and nature. Visit worldwildlife.org to learn more.