Overview of Environmental, Social, and Government Reporting in the Food Industry: Past, Present, and Future

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This UM-SEAS team partnered with the Kellogg Company to assess material ESG risks in agricultural commodity sourcing associated with a growing business in its portfolio. Expectations and scrutiny are growing for public companies' evaluation, disclosure, and mitigation of ESG risks, especially for high-impact business operations like ingredient sourcing. To meet this scrutiny – and, to respond effectively to growing challenges resulting from climate change and other systemic sources of ESG risk - public companies must understand how to link ESG risk assessment with ESG performance and disclosure. This understanding will better enable them to build and execute ESG strategies that mitigate risks in their business operations (in this case, in their ingredient sourcing) and support credible ESG reporting and disclosure.

As a companion to the team's ESG assessment of select agricultural commodities key to Kellogg Company, the team also evaluated the current state of play for:

- How ESG reporting expectations are evolving
- How well the most widely adopted frameworks for voluntary ESG reporting (GRI and SASB) map to KPIs (key performance indicators) for ESG risk in agricultural commodity production
- What actions could be taken to reconcile gaps between how ESG risk and ESG performance are measured for agricultural commodities to enable more effective and holistic strategies to respond to critical ESG issues in the field and in supply chains

The Beginning of ESG Reporting

While the Environment, Social, and Governance (ESG) movement we know today has become especially prominent over the past decade, its origin starts many decades ago. In the 1970s, social, political and economic activism increased due to the US involvement in the Vietnam war and the anti-war movement pushed for sustainable investing practices.[1] In the 1980s, the anti-apartheid movement in South Africa led to divestment movements and the Exxon Valdez oil spill led fossil fuel companies to be scrutinized by the public and activists. In the 1990s, the Kyoto protocol convened world leaders to address climate change and the Global Reporting Initiative (GRI) was founded with the goal of providing businesses and organizations a global common language to communicate impact. Then in 2000, Kofi Annan launched the UN Global Compact (UNGC) Initiative, a voluntary, corporate-citizenship effort to align strategies and operations with universal principles on human rights, labor, environmental, and anticorruption. It provided companies with international, independent standards on how to communicate their impact on issues such as climate change, human rights, and corruption.[2] Also in 2000, the Carbon Disclosure Project (CDP) launched. It aimed to create a global economic system that protects against climate change by pushing businesses to prioritize environmental reporting and risk management. In 2002, CDP established its environmental disclosure program, and has since grown to be the platform for over 8,400 companies in 800 cities and 120 states and regions.[3]

Building on this history, the formal concept of ESG first emerged in 2004, when the UNGC released its "Who Cares to Win" report, which made the case that embedding environment, social, and governance factors into the capital markets made sense for businesses and would lead to better environmental and social outcomes.[4] This was closely followed by the launch of UN Principles for Responsible Investment in 2006 and the release of its "Freshfield Report", which further argued that ESG issues were relevant to financial valuations.[5] These two reports coined the term "ESG." At the time, 63 investment companies composed of asset owners, asset managers, and service providers with $6.5 trillion in assets under management (AUM) agreed to incorporate ESG issues into their investment strategies.[6] In 2007, the Sustainable Stock Exchange (SSEI) was

[1] Liu, J. (2020, June 8). *ESG Investing Comes of Age*. Morningstar, Inc. Retrieved February 2022, from https://www.morningstar.com/features/esg-investing-history

[2] Liu, J. (2020, June 8). *ESG Investing Comes of Age*. Morningstar, Inc. Retrieved February 2022, from https://www.morningstar.com/features/esg-investing-history

[3] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

[4] Barnes, K. (2021, May 6). *ESG Timeline: A History of Environmental, Social & Governance Programs*. sgENGAGE. Retrieved February 2022, from https://npengage.com/companies/esg-history/

[5] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

[6] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

launched, signaling that ESG investment strategies were becoming mainstream in capital markets.[7] It is worth mentioning that ESG's evolution was somewhat distinct from Socially Responsible Investing (SRI), with ESG guidance putting somewhat more emphasis on financial returns in addition to valuing environment and social factors in business practices.[8]

Since the late 2000s, ESG has continued to evolve and become more important as climate change, labor practices, and environmental degradation have become more prominent in business and consumers are increasingly making purchasing decisions based on sustainability and environmental issues.[9] The importance of ESG to investors has continued to grow, with many countries now mandating ESG disclosures for select public companies.[10] In 2011, the Sustainability Accounting Standards Board (SASB) was founded and created frameworks designed specifically for certain industries such as consumer goods, utilities, telecommunications, and more.[11] SASB's goal was to allow investors to compare performance on critical social and environmental issues, and capital could be directed to the most sustainable outcomes. In 2018, Larry Fink, CEO of Blackrock, the world's largest asset management company in the world with nearly $6T in AUM, pleaded with CEOs to position themselves for long-term profitability and focus on their role in society.[12] As of June 2019, the UN Principles for Responsible Investment, an UN-backed investment network that promotes ESG investing based on six key principles, has 2,450 signatories, representing over $80 trillion in AUM.[13]

Over time, evolving ESG indexes and standards have contributed to a business environment in which "ESG" functions as a more mainstream umbrella term to represent the ways in which companies, particularly publicly traded multinationals, act as good social and environmental stewards. This stewardship includes identifying and mitigating ESG risks in their operations and sourcing, and integrate their ESG activities, measures, and impacts into their annual disclosures to a growing network of investors, customers, and stakeholders. In a 2021 survey of US public companies, 52% said they publish voluntary CSR, sustainability, or ESG reports outside of their SEC filings. Globally, in KPMG's 2020 Survey of Sustainability Reporting, which

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[7] *About | Sustainable Stock Exchanges*. (2019). Sustainable Stock Exchange Initiative. Retrieved February 2022, from https://sseinitiative.org/about/

[8] *S&P Global*. (2020, February 25). S&P Global. Retrieved February 2022, from https://www.spglobal.com/en/research-insights/articles/what-is-the-difference-between-esg-investing-and-socially-responsible-investing

[9] Intergovernmental Panel on Climate Change. (2020, February). *Climate Change 2022: Impacts, Adaption, and Vulnerability*. https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf

[10] Nelson, R. (2021, November 16). *Examining the state of worldwide mandatory ESG disclosures*. Goby. Retrieved February 2022, from https://www.gobyinc.com/examining-worldwide-mandatory-esg-disclosures/

[11] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

[12] Sorkin, A. R. (2018, January 16). *BlackRock's Message: Contribute to Society, or Risk Losing Our Support*. The New York Times. Retrieved February 2022, from https://www.nytimes.com/2018/01/15/business/dealbook/blackrock-laurence-fink-letter.html

[13] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

surveyed the 100 companies by revenue from 52 countries and jurisdiction (5,200 companies total), it found that in 2020, 80% of the companies published a sustainability report as opposed to just 12% in 1993.[14]

Overall, ESG, whether based on investing or business practices, is still fairly young and ever evolving. Nevertheless, the rise of ESG investing has shown that committing to ESG principles and sustainability is important to humanity and the market. It shows that investors truly belief that implementation of ESG values, criteria, and business practices will lead to improved return and outcomes in the long-term. Moreover, consumers and the public are increasingly paying attention to ESG, as it has become a greater factor in what consumers are buying and in attracting and retaining employees. A 2019 study of the S&P 500 companies by NASDAQ confirmed this, as they studied the MSCI ESG ranking and a variety of performance metrics, it was found over the 5 years, companies considered as sustainability leaders under the MSCI framework exhibited higher returns and less risk. So, while still relatively young, all company executives need to think about ESG being a part of a company's strategy. ESG continues to gain momentum.

As it has become more mainstream, various frameworks for reporting a company's ESG activities and situation have arisen to allow investors to understand what various investment funds and companies are doing to address environmental, social, and governance issues. Each framework is different and geared towards different types of disclosure such as sustainable investing, climate-related financial risks, sustainability actions most financially material to investors. In fact, in 2020, potentially in response to the explosion of different reporting mechanism and citing the ambiguity surrounding ESG ratings, the US Securities and Exchange Commission announced it was going to create an ESG disclosure framework to allow for consistent and comparable information without the use of third parties.[15]

ESG Reporting Today

Today, comprehensive ESG reporting frameworks and standards for international markets are evolving quickly and serve as an important tool for companies across all sectors to measure and communicate ESG metrics and improve transparency for shareholders, stakeholders, and consumers alike. Currently, the majority of ESG reporting is voluntary, though exceptions apply for specific risks or commodities that have become a matter of regulatory compliance. One example of mandatory reporting for social risk is the Australia's Modern Slavery Act, which requires both Australian entities and those who carry on business in Australia with a minimum annual revenue of $100 million to report risk of modern slavery in operations and supply chains.[16]

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[14] KPMG. (2020). *The KPMG Survey of Sustainability Reporting 2020*. https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf

[15] Atkins, B. (2021, December 10). *Demystifying ESG: Its History & Current Status*. Forbes. Retrieved February 2022, from https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=488905932cdd

[16] McGregor, A. (2021, November). *Modern slavery act: What businesses in Australia need to know*. Norton Rose Fulbright. Retrieved February 2022, from

Another example of this for a raw input is section 1502 of the Dodd Frank Act, which requires U.S. listed companies to disclose use of conflict minerals (tin, tungsten, tantalum, and gold) and whether these minerals originate in the Democratic Republic of the Congo (DRC) or an adjoining country.[17] Moving forward, more elements of ESG disclosure might become a matter of regulatory compliance for publicly traded companies, at least in some key markets. The European Commission's November 2021 proposal of new EU regulation on deforestation-free products provides just one example of this potential shift.[18]

However, regardless of the current state of public reporting, many companies are opting into reporting, with 96% of the world's 250 largest companies (G250) reporting on sustainability performance.[19] As of June 2021, the top five ESG reporting frameworks were the Carbon Disclosure Project (CDP), Climate Disclosure Standards Board (CDSB), International Integrated Reporting Council (IIRC), Sustainability Accounting Standards Board (SASB), and the Global Reporting Initiative (GRI).[20] Among these, the KPMG Survey of Sustainability Reporting from 2020 identified GRI as the most commonly used reporting standard and flagged both SASB and the International Standards Board (ISO) as commonly used for sustainability reporting.[21] The Kellogg company reports into both GRI and SASB are highly relevant to current reporting expectations for publicly traded companies, even as governance and indicators for ESG continue to evolve.

GRI provides both Universal Standards and Topic-specific standards for disclosures.[22] Within the Universal standards, the foundation, GRI 101, serves as a starting point for using GRI standards. Then, users see GRI 102, general disclosures, which serve as a place for companies to report contextual information about the organization, and GRI 103, which is focused on management approach for each of the material topics. Finally, there are topic-specific standards, which cover topics such as anti-corruption, energy, and child labor. SASB, on the other hand, provides industry-specific standards, with a subset of environmental, social, and governance issues in 77 industries.[23] Companies disclosing their ESG strategies and measures through SASB do so

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https://www.nortonrosefulbright.com/en/knowledge/publications/06a565ee/modern-slavery-act-what-businesses-in-australia-need-to-know

[17] Woody, K. (2019, November 12). *Section 1502 of the Dodd-Frank Act: Past, Present & Future*. Assent. Retrieved February 2022, from https://www.assent.com/blog/dodd-frank-past-present-future/

[18] Directorate-General for Environment. (2021, November 17). *Proposal for a regulation on deforestation-free products.* European Commission. Retrieved March 1, 2022, from https://ec.europa.eu/environment/publications/proposal-regulation-deforestation-free-products_en

[19] Global Reporting Initiative. (2020, December 1). *Sustainability reporting is growing, with GRI the global common language*. Retrieved February 2022, from https://www.globalreporting.org/about-gri/news-center/2020-12-01-sustainability-reporting-is-growing-with-gri-the-global-common-language/

[20] Niemoller, J. (2021, June 8). *ESG Reporting Frameworks: Comparing CDP, GRI & More*. Perillon. Retrieved February 2022, from http://www.perillon.com/blog/esg-reporting-frameworks

[21] KPMG International. (2020, December). *The Times Has Come: The KPMG Survey of Sustainability Reporting 2020*. KPMG International. Retrieved February 2022, from https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf

[22] Global Reporting Initiative. (2022). *GRI Standards English Language.* Global Reporting Initiative. Retrieved February 2022, from https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/

[23] Sustainability Accounting Standards Board. (2022). *Download SASB standards.* Value Reporting Foundation SASB Standards. Retrieved February 2022, from https://www.sasb.org/standards/download/

by responding to the sector and industry questionnaire that best describes their organization (e.g., food manufacturers, as an industry within the consumer goods sector).[24]

In addition to providing independent frameworks for corporate ESG reporting and communications, GRI and SASB have been utilized in other ESG related task forces designed to more holistically integrate ESG issues into risk identification and financial disclosures. For instance, at the time of writing, the Value Reporting Foundation has integrated SASB's standards into their framework alongside the integrated thinking principles and reporting framework into their resources.[25] Additionally, the Task Force on Climate Related Financial Disclosures (TCFD), created by the Financial Sustainability Board, references both GRI and SASB in its framework for climate risk disclosure and remediation.[26]

It is worth noting that along with the rise in ESG reporting platforms has come aggregators and analysts. Aggregators, such as Bloomberg and Refinitiv, compile ESG specific data for use in reporting. Additionally, analysts have entered the space, like the World Benchmarking Alliance, Sustainalytics, and the Dow Jones Sustainability Indexes to name a few, who have established criteria for measuring ESG performance for companies and comparing a company's ESG risk and mitigation relative to industry peers.[27] These players are becoming increasingly important as stakeholder, shareholders, and consumer awareness and scrutiny of ESG risk grows, informing their interest to evaluate companies' ESG performance with standardized metrics and invest in organizations whose values and objectives align with their own.

2022 ESG Reporting for Agricultural Production and Commodities

Agriculture ESG reporting and disclosure is particularly important for packaged food companies, such as The Kellogg Company, that rely heavily on the land sector for their sourcing and operations. According to the World Resources Institute, land sector as a whole is responsible for about 23% of global greenhouse gas emissions and requires both an extensive use of natural resources and human capital to function.[28] Further, the agricultural industry is one of the largest employers in the world, employing 1 billion people globally and generating 4% of GDP.[29]

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[24] Sustainability Accounting Standards Board. (2022). *Download SASB standards.* Value Reporting Foundation SASB Standards. Retrieved February 2022, from https://www.sasb.org/standards/download/

[25] The Value Reporting Foundation. (2022). *About The Value Reporting Foundation*. The Value Reporting Foundation. Retrieved February 2022, from https://www.valuereportingfoundation.org/about/

[26] Task Force for Climate-Related Financial Disclosures. (2017, June). *Recommendations of the Task Force for Climate-Related Financial Disclosures*. Assets. Retrieved February 2022, from https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf

[27] Chapman and Cutler LLP. (2021, May 25). *The Role of ESG Ratings Providers in Assessing ESG Performance and Risks*. Chapman and Cutler LLP. Retrieved February 2022, from https://www.chapman.com/publication-ESG-ratings-providers-important-data-point

[28] Levin, K., & Parsons, S. (2019, August 8). 7 things to know about the IPCC's special report on Climate change and land. *World Resources Institute.* Retrieved March 2022, from https://www.wri.org/insights/7-things-know-about-ipccs-special-report-climate-change-and-land

[29] Rural Migration News. (2021, January 12). FAO: AG employs 27% of world's workers, generates 4% of. Retrieved March 2022, from https://migration.ucdavis.edu/rmn/blog/post/?id=2510

ESG reporting in this industry is key as agriculture is not only highly susceptible to the impacts of climate change but can also be looked to as a source of solutions for adapting to and mitigating climate change. ESG reporting for agricultural production and commodities is typically broken up into commodity crop or ingredient, such as maize or wheat. Certain globally traded commodities have been flagged for posing elevated ESG risk to companies that source them due to associated environmental degradation or social harm. The World Wildlife Fund has listed seafood, beef and dairy, palm oil, soy, and sugarcane as priority commodities because of their significant environmental strain and traditionally unsustainable supply chains.[30]

In response to these risks, companies may use third-party certification schemes created by multistakeholder initiatives, such as the Roundtable on Sustainable Palm Oil, Roundtable for Responsible Soy, or Bonsucro (a non-profit group to promote sustainable sugarcane), as assurances of the use of sustainable production practices in their supply chain. They may also be used as proxy measures for ESG risk mitigation and performance. For example, the Roundtable on Sustainable Palm Oil benefits its members through provision of the RSPO credit and certification system, but by promoting growth and demand for the sustainable palm oil market, with the intent to increase supply for the product.[31] In addition, voluntary roundtables can provide companies the opportunity to advocate precompetitively for more sustainable commodity production, including through improved governance in countries where these commodities are produced.[32]

As an alternative or complement to third-party certification standards for individual commodities, companies may also implement surveys or impact calculators in their ingredient supply chains to confirm and improve farmers' adoption of best management practices. These tools may include qualitative or quantitative measures of practices that mitigate ESG risk (e.g., adoption of farm practices that tend to reduce greenhouse gas emissions), create ESG value (e.g., adoption of practices that tend to improve farmers' climate resilience), or reduce ESG impact (e.g., direct measurement or estimates of GHG reduction resulting from changes in farm practice). Common farm practice questionnaires include, but are not limited to, the SAI Farm Sustainability Assessment and various proprietary company surveys benchmarked to SAI's levels of third-party assurance of farm practices. Common environmental impact calculators designed for agricultural commodities include the Cool Farm Tool and the Fieldprint Platform. Companies may use these surveys and calculators for ongoing assessment of their supply chains or to support monitoring and evaluation of direct investment programs they develop and fund on the ground with suppliers and/or farmers. Results gathered with these tools may then be used as part of companies' responses

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[30] World Wildlife Fund. (2022). WWF Sustainable Food Initiatives. Retrieved February 2022, from https://www.worldwildlife.org/initiatives/food

[31] World Wildlife Fund. (2022). WWF Sustainable Food Initiatives. Retrieved February 2022, from https://www.worldwildlife.org/initiatives/food

[32] Devine, K. (2021). The Business Case for Pre-Competitive Collaboration: The Global Salmon Initiative (GSI). *Markets Institute, World Wildlife Fund.* Retrieved March 2022, from https://c402277.ssl.cf1.rackcdn.com/publications/1283/files/original/GSI_Business_Case_07-19_v8.pdf?1576875829

to ESG reporting frameworks to demonstrate actions to mitigate risk or support farmers' continuous improvement in environmental or social impact.

The Future of ESG Reporting as it relates to agricultural supply chains

Increased attention to ESG reporting provides both challenges and opportunities for many businesses. Accurate ESG reporting offers the ability to identify risks and find unique solutions to help mitigate large scale challenges associated with climate change and reducing carbon footprints; to smaller, sector scale challenges involving accurate data collection and utilizing advanced technology[33]. Additionally, increased ESG reporting attention has drawn the desire for reporting standardization, for which there is currently no standard, and may be seen as an overarching trend for the future of ESG reporting[34].

Agricultural supply chains provide an interconnection between business and agriculture and allow for the opportunity to jointly address ESG goals in both sectors. Agriculture ESG trends have seen increased demand for data collection embracing new agriculture technology across the sector. Assimilating these items offers the potential to reduce inputs, prevent biodiversity loss, utilize insetting and address regenerative agriculture opportunities[35]. These items interconnect with the supply chain ESG trends that seek to address challenges in reducing carbon footprint, waste reduction, data collection for analytics and forecasting, and utilizing advanced technology[36].

Understanding and utilizing ESG reporting in the agriculture supply chain, therefore, offers the potential to drive action in the supply chain, understand the risks and costs associated with climate change and accurately calculate the cost of inaction to investors and stakeholders. In addition, the opportunity to identify ESG gaps and risks in business models and find solutions at the appropriate scale.

Evaluating GRI and SASB As Frameworks for ESG disclosure for agricultural commodities

Before the team began commodity specific risk research, we first sought to understand how well ESG reporting KPIs aligned with measures publicly traded companies may use to assess social and environmental risk for commodities, including agricultural commodities. Comparing ESG *risk* KPIs to ESG *performance* KPIs provided a framework for how food manufacturers design their ingredient sourcing expectations to both mitigate risks identified in

[33] Carlson, D. (2021, March 24). *Sustainable Agriculture is the next way ESG investors can fight climate change*. MarketWatch. Retrieved April 10, 2022, from https://www.marketwatch.com/story/7-ways-for-esg-investors-to-profit-from-sustainable-agriculture-11616600205

[34] *S2G Ventures reveals 10 trends shaping the future of Food & Agtech in 2022*. (2022, January 5). Retrieved April 10, 2022, from https://www.freshfruitportal.com/news/2022/01/05/s2g-ventures-reveals-10-trends-shaping-the-future-of-food-agtech-in-2022/

[35] *A Practical Guide to Insetting*. (2022, March). Retrieved April 10, 2022, from file:///Users/jareddrapinski/Downloads/IPI-Insetting-Guide.pdf

[36] *Regenerative Agriculture How to Make it Grow*. (2022). Retrieved April 10, 2022, from https://sustainablefoodlab.org/wp-content/uploads/2022/02/2021-Scale-Lab-final.pdf

their supply chains and create ESG value recognized by credible third-party platforms. These insights may be useful for the consumer-packaged goods industry at large.

To create a framework applicable across the majority of the food and beverage industry, the assessment focused on widely adopted platforms for risk assessment and reporting. We began by using risk KPIs defined with Sedex Radar. Sedex reports a member base of more than 65,000 businesses[37] – including but not limited to Nestle, Mars Inc., Unilever, Groupe Danone, PepsiCo, and the Kellogg Company - which use Sedex tools such as SMETA audits to assess and "improve business practices and the working conditions in global supply chains." Sedex members have access to Sedex Radar tools designed for preliminary risk screens of supply chains globally traded commodities, including agricultural goods, using a variety of publicly available risk indices and peer-reviewed literature.[38] While a number of proprietary, supply chain risk assessment tools and services are available to food manufacturers, the team chose Sedex Radar KPIs for our exercise as an example of representative risk assessment measures typically available to a large base of Sedex users likely also participating in voluntary ESG reporting.

The team compared definitions of Sedex Radar's 14 indicators for environmental or social risk in commodity production and sourcing with relevant indicators GRI, SASB Agricultural Products, and SASB Processed Foods. The team also compared Sedex Radars indicators for governance with the World Bank's World Governance Indicators. This resolved a difference in how governance is scoped between Sedex Radar - which focuses on potential risks related to the credibility, transparency and effectiveness of public governance, for the production of a given commodity in a given jurisdiction – and GRI and SASB, which focus on measures of corporate governance. In the table below (Figure 1), ESG performance indicators (GRI, SASB, WGI) are compared with ESG risk indicators (Sedex Radar) to confirm how well ESG reporting standards cover known potential risks in agricultural commodity production. Importantly, this assessment focused on farm-level activities, rather than on downstream supply chain activities post-farmgate. This focus was intended to capture indicators for business activities that have a significant impact on a food manufacturer's ESG impact due to the scale and complexity of agricultural production globally.

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[37] Sedex. (2022). *Our members*. Sedex. Retrieved April 10, 2022, from https://www.sedex.com/about-us/our-members/

[38] Sedex. (29, April, 2021) *Understanding supply chain risks with the Radar Risk Tool.* Sedex. Retrieved April 10, 2022, from https://www.sedex.com/understanding-supply-chain-risks-with-the-radar-risk-tool/

Figure 1. Heat Map of Sedex Radar and World Bank's Governance Indicators

Sedex Radar Indicator	Sedex Radar Sub-Indicator	GRI	SASB (Agricultural Products)	SASB (Processed Foods)	Worldwide Governance Indicators*
Health and Safety	**Health and Safety**				
Labor Standards	**Forced Labor**				
	Freedom of Association				
	Children and Young Workers				
	Regular Employment				
	Wages				
	Working Hours				
	Discrimination				
	Gender				
Business Ethics	**Business Ethics**				
Environment	**Biodiversity**				
	Energy & Emissions				
	Water				
	Waste & Pollution				
Governance	**Voice and Accountability**				
	Political Stability and Absence of Violence				
	Government Effectiveness				
	Regulatory Quality				
	Rule of Law				
	Control of Corruption				

Color/Coverage	Description	Additional Clarification
None	Platform provides no coverage of indicator in reporting expectations	Low vs. Medium Example: Forced Labor. GRI is Medium due to adequate coverage. The GRI indicator lists factors to be taken into consideration for risk. Reporting requires disclosure of measures being taken to eliminate forced labor from the organization. Forced labor is low for SASB. SASB groups forced labor in with child labor and health and safety. Not only do these
Low	Platform provides limited or very limited coverage of indicators in reporting expectations. More information required for adequate coverage	

Medium	Platform provides adequate coverage of indicator in reporting expectations. More information could be helpful, but not necessary	categories vary widely by what risk is being calculated but, only quantitative disclosure of major/minor incidents is required in reporting.
High	Platform provides complete coverage of indicator in reporting expectations.	