

# An Assessment of the Role of Sustainability Goals in Trade Rules

MATS Deliverable 1.3



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# Summary

The aim of Deliverable 1.3 was to “set the scene” for the MATS project by conducting a brief analysis of the current linkages between trade rules and the SDGs. This was done by reviewing relevant literature and databases as well as text analysis in the Atlas.ti software package. The focus of the study was on the EU’s Non-Tariff Measures (NTMs), a selection of EU trade agreements with developing countries as well as Voluntary Sustainability Standards (VSS) applicable to agriculture.

The analyses showed that all three types of trade rules have indirect linkages with the SDGs. For the NTMs and trade agreements these linkages were relatively concentrated on a limited set of SDGs. However, the VSS cover a much broader range of SDGs.

SDG3 (health and wellbeing) had the highest coverage in the EU NTMs and SDG8 (decent work and economic growth) recorded the highest coverage in the selected EU trade agreements. For the agricultural VSS, most of the linkages were with SDG16 (peace, justice, and strong institutions). SDG6 (water and sanitation) recorded the weakest coverage in all three types of trade rules.

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<sup>1</sup> R = Report, P = Prototype, D = Demonstrator, O = Other

<sup>2</sup> PU = Public, CO = Confidential, only for members of the consortium (including the Commission Services)

## 1. Introduction

International trade rules are increasingly being used to support sustainable development across the globe. This can be either through bilateral and multilateral trade agreements between governments or through private standards as set by industry or civil society<sup>3</sup>. Most trade flows between the European Union (EU) and developing countries are governed by a set of 20 different trade agreements. Furthermore, a total of 119 different Voluntary Sustainability Standards (VSS)<sup>4</sup> are relevant for agricultural exports to the EU (ITC, 2022).

Agricultural trade specifically has a role to play in achieving the Sustainable Development Goals (SDG's) as it has the potential to increase wellbeing, income, social welfare, food security, biodiversity, sustainable farming practice (see: Duncan and Claeys, 2018; FAO *et al.*, 2019; UN Committee on World Food Security, 2015; Oxfam, 2016; IATP, 2017). This role and impact are however not inherent and are strongly reliant on the national policy settings and the production structure of countries and on the nature and degree of international economic cooperation and governance (OECD, 2017). The latter predominantly depends on how bilateral, plurilateral and multilateral trade policies have been shaped. These agreements have however frequently been criticised for their negative impact on sustainable development (OECD, 2021). Therefore, a limited number of countries (e.g., Canada, the EU, the UK) these days conduct (ex- and post-ante) Sustainability Impact Assessments (SIA) of trade agreements to inform negotiations and domestic reforms (OECD, 2021).

Apart from the above-mentioned benefits of trade, in some instances increased globalisation has also resulted in unsustainable production and consumption patterns (Blankenbach, Negi and Pérez-Pineda, 2020; Alvarado *et al.*, 2021). Hence, these impacts are widely recognized and therefore sustainability concerns are being increasingly embedded in standards and regulations governing trade as they set certain social and environmental criteria for products and production. UNCTAD estimates that standards and regulations have an impact on 80 percent of global trade.

Blankenbach *et al.* (2020) noted that sustainability standards generally have a high-level of acceptability in a domestic setting. However, in an international trade perspective they tend to be perceived and act as a barrier to trader Morin & Lechner,

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<sup>3</sup> Note that besides trade agreements and VSS, the EU also applies unilateral sustainability standards.

<sup>4</sup> Requirements that producers, traders, manufacturers, retailers, or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others (UNFSS, 2013).

2018; Rodrik, 2018), with the Carbon Border Adjustment Mechanism (CBAM) being a case in point (Eicke *et al.*, 2021; Meyer and Tucker, 2021; Zachmann and McWilliams, 2020). Another case of possible trade impediment is the differences in sustainability standards between markets. For example, the definition of organic food within the three largest import markets, the EU, USA and Japan, is not the same. Striking the balance between genuine sustainability reasons and not allowing them to hamper trade is thus crucial (Blankenback *et al.*, 2020) this will also require including third-countries in the consultation process when setting standards.

Against this broad background, the MATS project aims to improve understanding of key leverage points in governance, design and implementation which support a shift of international trade towards greater resilience and equity. This specific deliverable (D1.3) aims to “set the scene” for the project by conducting a stocktaking of the current links between trade rules and the SDG’s.

The focus of the analysis will be specifically on Non-Tariff Measures (NTM’s), trade agreements and VSS. Though, trade rules are broader and also includes multilateral agreements, mandatory public- and other voluntary private product standards.

The focus of the MATS project is on agricultural trade linkages between the EU and developing countries<sup>5</sup> in Asia, Africa, and Latin America. Hence, multi-lateral agreements, such as African Continental Free Trade Agreement (AcFTA)<sup>6</sup> or rules of the World trade Organisation (WTO), have a different or much broader geographical scope and where therefore not considered in the analysis for this report.

It is noteworthy that one of the goals of the AcFTA is “to promote and attain sustainable and inclusive socio-economic development, gender equality and structural transformation of the State Parties” (Article 3, Clause e) which broadly links to the SDGs (SEATINI, undated). However, analysis by SEATINI (undated) shows that the text if this continent-wide FTA has no direct linkages with any of the specific SDG goals.

The WTO provides an additional global legal framework linked to sustainability standards. The Sanitary and Phytosanitary (SPS) Agreement is the only mandatory legal reference in this regard. Furthermore, the institution recommends that all its members should adopt sustainability standards as laid out in their Codex Alimentarius

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<sup>5</sup> Using the World Bank classification of low income and lower middle-income countries a total of 82 countries were identified in these regions.

<sup>6</sup> This agreement came into force on the 1<sup>st</sup> of January 2021 and is the largest free trade arrangement in the world, comprising all 54 members of the African Union.

or stipulated by the World Organisation for Animal Health (OIE) and International Plant Protection Convention (IPPC) (Blankenbech *et al.*, 2020).

Private standards, besides the VSS relevant to agricultural trade, mostly focus on food safety and quality attributes and are therefore beyond the scope of this report. It is assumed that most of the mandatory public product standards in the import market (EU) are covered by their respective NTMs.

In terms of the SDGs, the MATS project puts special emphasis on SDG1 'No Poverty', SDG2 'Zero Hunger' and SDG3 'Good Health and Wellbeing', as well as SDG6 'Clean Water', SDG13 'Climate Action' and SDG15 'Life on Land'. Hence, these goals, together with SDG8 on 'Decent Work and Economic Growth', will form the focal point of the analysis in this report, though, in some instances all SDG's have been included.

The next sub-section will analyse the links between the NTM's prevalent in the EU and the SDGs. Section 3 will do the same for a selected set of trade agreements between the EU and developing countries. Section 4 will discuss the linkages between VSS and the SDG's. Each section will briefly review some of the previous work conducted on the topic and then discuss the approach and present the results.

## 2. Links between EU NTM's and the SDGs

NTM's have grown tremendously in importance within the global trade system over the last few decades. These policy measures cover a wide range of product and production aspects ranging from labelling requirements to maximum residue levels. UNCTAD data shows that almost 100% of agricultural products imported into the EU are subject to NTM's.

NTM's are not inherently bad or good. They can be perceived as trade prohibiting measures, but they often serve important purposes in terms of protecting human, animal, and plant health. Knebel and Peters (2015) argue that NTM's also have a role to play in sustainable development. This can be via a direct linkage in that NTM's can become a barrier to trade which weakens the developmental potential of trade. On the other hand, they argue that the linkage between NTM's and sustainable development can be indirect. Many of the underpinnings of NTM's can be linked to the SDG's such as food security (SDG2), nutrition and health (SDG3) and protecting endangered species (SDG14).

A comprehensive study by UNCTAD (2019) analyses the linkages between NTMs and the SDGs in Asia and the Pacific. The main finding was that on average 41.5 percent of the NTM's are directly addressing SDG's. Most often they are linked to SDG2 (zero

hunger) and SDG3 (good health), as well as SDG12 (responsible production and consumption) and SDG16 (peace, justice, strong institutions).

To explore these linkages UNCTAD and UN ESCAP developed a global NTM-SDG concordance table. An NTM (disaggregated at product-level using the Harmonised System) is considered to link to a specific NTM if (UNCTAD, 2021):

- It has a clearly stated SDG target-related objective.
- The examined NTM-HS code combination is not likely to have any objective other than the one that is relevant to an SDG.

The UNCTAD database on NTMs and SDGs was used to analyse these linkages for the EU. The results are shown in Figure 1. For comparison, the graph also shows the global average. It is evident from the Figure that a total of nine out of 17 SDGs could be linked to the NTMs enforced by the EU. The strongest linkages are with SDG3 (good health), SDG12 (responsible production and consumption) and SDG 2 (zero hunger). The NTM linkages with SDG6 (clean water) and SDG15 (life on land) are the weakest. However, that pattern is in line with the global average. The Figure also shows that the EU is lagging relatively far behind the global average linkages with regards to SDG2 and SDG3. The general pattern revealed in Figure 1 is that the NTMs in the EU have moderately strong links with a relative narrow spread of SDGs.

Noteworthy is that exporting countries complying with the NTMs prevalent in the EU are thus de facto addressing some of the SDGs.

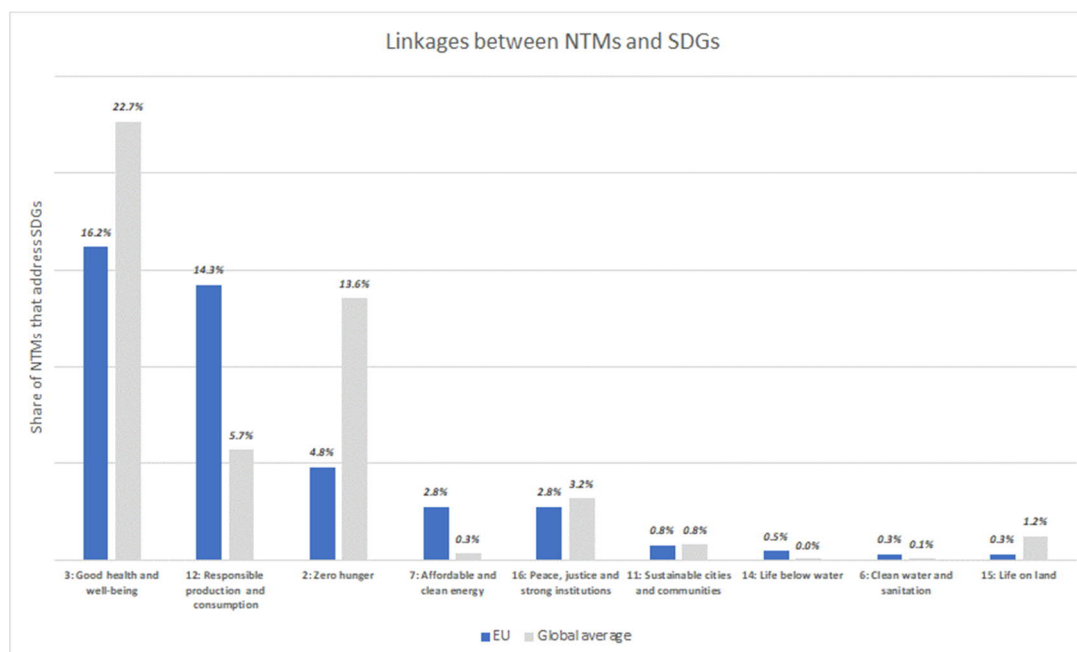


Figure 1: NTM-SDG linkages in the European Union  
Source: UNCTAD (2021)

### 3. Links between EU trade agreements and the SDGs

#### 3.1 Introduction

A growing number of international trade agreements have incorporated sustainable development provisions (UNCTAD, 2016). A study by Agusti-Panereda, Ebert and Le Clery (2014) found that labour provisions in free trade agreements increased from only four in 1995 to 47 by 2011. An assessment by the International Labour Organisation (ILO, 2016) found that 80 percent of the trade agreements that have come into force since 2013 contain provisions on labour standards. They further found that these labour provisions are also increasingly being included in trade agreements beyond the traditional trade blocs (i.e., the EU, USA and Canada).

However, in the earlier trade agreements these labour provisions were limited to the preambles and refer to the 1998 ILO *Declaration on Fundamental Principles and Rights at Work* (Doumbia-Henry and Gravel, 2006). More recent, the EU lists the labour provisions in the Trade and Sustainable Development (TSD) chapter of their FTA's, but these are not subject to trade dispute settlement.

Environmental provisions are also relatively common in international trade agreements. The first major agreement to include these was the North American Free Trade Agreement (NAFTA) (UNCTAD, 2016). A study by the OECD (2014) specifically looked at the types of environmental provisions and found that 78 percent of the trade agreements in force in 2012 included the General Agreement on Trade and Tariffs (GATT)<sup>7</sup> exceptions for the protection of human, animal, and plant life. However, the study found that the use of more substantial environmental provisions, such as cooperation, public participation, dispute settlement, multilateral environmental agreements (MEA), was very limited.

With regards to the EU, the TREND Analytics database<sup>8</sup> shows it concluded 210 trade agreements with a total of 3 567 environmental provisions: averaging to 17 provisions per agreement. The database shows this is far more than the trade agreements concluded by any other country/trade bloc.

#### 3.2 Approach

To date no comprehensive study has been conducted on the linkages between EU trade agreements and the different goals and targets of the SDGs specifically. This report will attempt to provide more insights in this regard within the scope of the

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<sup>7</sup> GATT Articles XX

<sup>8</sup> Berger, Axel/Brandi, Clara/Bruhn, Dominique/Morin, Jean-Frédéric (2017): TREND analytics - Environmental Provisions in Preferential Trade Agreements. German Development Institute (DIE), Bonn, Germany, and Université Laval, Canada.



MATS project. This entails that the country-focus of the EU trade agreements will only include developing countries (see also footnote 4). Therefore, a total of 20 trade agreements were selected for the analysis. An overview of these is provided in the maps in Figure 2. The maps show that the selection includes four agreements for Asia, 11 agreements for Africa, two agreements for Latin America / the Caribbean, and the EU's General System of Preferences (GSP). A complete overview of the agreements (type, signatories, status, and year) can be found in Annex 1.

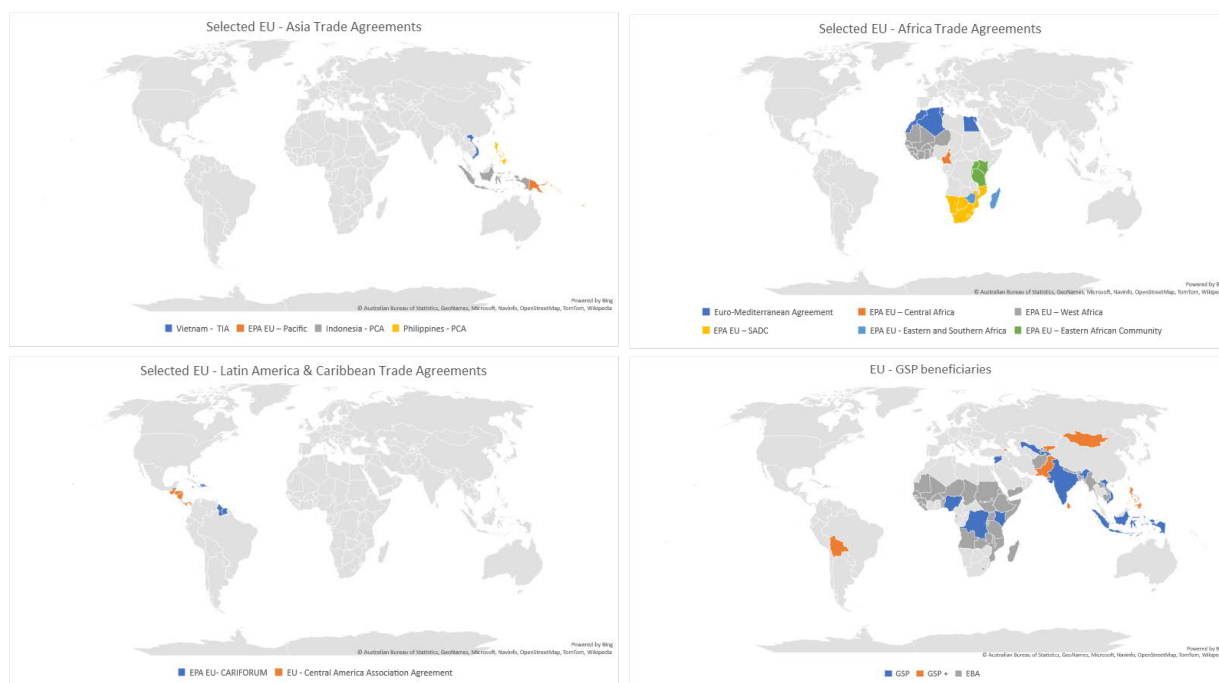


Figure 2: Geographical overview of the selected EU trade agreements

The scope of the analyses focusses on SDGs 1, 2, 3, 6, 8, 13 and 15 (see also Section 1). To determine the link between the selected agreements and the respective SDGs, several “key terms” were extracted by the researcher based on the targets for each one of them. An overview of the goals and targets of each SDG as well as the identified “key terms” are provided in Annex 2.

The Atlas.ti software package was used to analyse the official legal texts of the agreements which were obtained from the website of the European Commission. The analysis consisted of coding these texts according to the specified “key terms” of each SDG. For each of the SDGs these “codes” were counted to provide an overview of the degree of linkages between the selected SDGs and the 20 agreements.

This is by no means an exhaustive analysis, but it does provide valuable insights into the degree of the coverage of the respective SDGs within the EU trade agreements.



### 3.3 Results

It is important to note that the text analysis showed that none of the selected agreements make direct nor implicit reference to the UN's SDGs. This may be not surprising as almost all of the selected trade agreements were negotiated and concluded before 2015 when the SDGs were adopted (see Annex 1).

Figure 3 shows a word-cloud build in Atlas.ti indicating the frequency of SDG keywords which were found in the 20 selected trade agreements. The word "health" was mentioned the most with 481 "hits" in all of the agreements, followed by "sustainable" with a frequency of 478 and education with 345 mentions. Terms like "inequality", "nutrition", "biodiversity" and "poverty" for instance, all show a very low prevalence in the respective trade agreements.



Figure 3: Word cloud of SDG keywords in the selected trade agreements

The results of the text analysis of the selected trade agreements are presented in the heatmap in Table 1. The first column shows the different trade agreements. Note that some of these agreements consist of two official texts. The FTA with Indonesia is still under negotiation (see Annex 1) and the concept texts for sustainable development (SD) and sustainable food systems (SFS) were both included in the analysis. The top row in the heatmap show the seven selected SDGs.

The values in the heatmap reflect the number of linkages between each trade agreement – SDG pair which are shaded from green to red. The weaker linkages are coloured green as where the stronger linkages are depicted in red. The last column and row show the totals.

The overall picture that becomes eminent from Table 1 is that the linkages between the selected trade agreements and the SDGs are generally weak. The only SDG that really stands out in the heatmap is goal eight which focusses on economic growth and decent work (e.g., labour standards). This specific SDG links moderately to strong with most of the trade agreements.

The table shows that the Economic Partnership Agreement (EPA) with CARIFORUM, the Association Agreement with Central America and the Trade and Investment Protection Agreement with Vietnam have particularly strong linkages with SDG8. Following at a relative distance are the number of linkages with SDG15 (life on land), SDG3 (health) and SDG1 (end poverty). Table 1 furthermore shows that SDG6 (clean water) and SDG13 (climate action) have the weakest coverage within this specific set of trade agreements.

The Economic Partnership Agreement (EPA) with CARIFORUM, the Association Agreement with Central America and the Trade and Investment with Vietnam also show the most overall linkages with these seven SDG's. The EPA's with Eastern and Southern Africa and the Eastern African Community (EAC) show a moderate level of linkages with the SDGs.

The second-last column in the heatmap covers the main concept of the SDG, namely: "sustainable development". This main goal was covered second most after SDG8. Again, the Association Agreement with Central America and the Trade and Investment with Vietnam showed the most "hits" in this regard.

Table 1: Heatmap of the linkages between selected SDGs and EU Trade Agreements

|                                     | SDG 1: End poverty | SDG 2: Zero hunger | SDG 3: Health and well-being | SDG 6: Clean water and sanitation | SDG 8: Decent work and economic growth | SDG 13: Climate change | SDG 15: Life on land | SDG: main goal | Totals |
|-------------------------------------|--------------------|--------------------|------------------------------|-----------------------------------|--|------------------------|----------------------|----------------|--------|
| EPA - Central Africa                | 4                  | 2                  | 3                            | 0                                 | 19                                     | 1                      | 4                    | 9              | 42     |
| EPA - Eastern & Southern Africa     | 5                  | 1                  | 4                            | 9                                 | 61                                     | 6                      | 16                   | 10             | 112    |
| EPA - Eastern African Community     | 9                  | 20                 | 4                            | 6                                 | 53                                     | 3                      | 15                   | 11             | 121    |
| EPA - SADC                          | 2                  | 6                  | 4                            | 1                                 | 23                                     | 0                      | 2                    | 17             | 55     |
| EPA - West Africa 1                 | 7                  | 14                 | 5                            | 1                                 | 20                                     | 0                      | 4                    | 16             | 67     |
| EPA - West Africa 2                 | 0                  | 0                  | 0                            | 0                                 | 4                                      | 0                      | 0                    | 0              | 4      |
| EPA W Africa - Ghana                | 0                  | 1                  | 0                            | 0                                 | 0                                      | 1                      | 0                    | 0              | 2      |
| EPA W Africa - Ivory Coast          | 2                  | 1                  | 4                            | 0                                 | 6                                      | 2                      | 1                    | 2              | 18     |
| Mediterranean Agreement - Algeria   | 3                  | 1                  | 4                            | 1                                 | 23                                     | 3                      | 2                    | 1              | 38     |
| Mediterranean Agreement - Egypt     | 2                  | 2                  | 6                            | 1                                 | 24                                     | 1                      | 70                   | 3              | 109    |
| Mediterranean Agreement - Morocco 1 | 2                  | 0                  | 1                            | 1                                 | 21                                     | 3                      | 0                    | 1              | 29     |
| Mediterranean Agreement - Morocco 2 | 0                  | 0                  | 0                            | 0                                 | 1                                      | 0                      | 0                    | 0              | 1      |
| Mediterranean Agreement - Tunisia 1 | 2                  | 0                  | 1                            | 1                                 | 20                                     | 3                      | 0                    | 1              | 28     |
| Mediterranean Agreement - Tunisia 2 | 0                  | 0                  | 0                            | 0                                 | 2                                      | 0                      | 0                    | 0              | 2      |
| EPA - Pacific                       | 2                  | 3                  | 0                            | 0                                 | 10                                     | 0                      | 3                    | 3              | 21     |
| FTA - Indonesia - Proposal SD       | 2                  | 0                  | 0                            | 0                                 | 19                                     | 5                      | 9                    | 12             | 47     |
| FTA - Indonesia - Proposal SFS      | 0                  | 1                  | 2                            | 0                                 | 7                                      | 4                      | 1                    | 1              | 16     |
| PCA - Indonesia                     | 2                  | 2                  | 4                            | 0                                 | 2                                      | 3                      | 2                    | 7              | 22     |
| PCA - Philippines                   | 1                  | 0                  | 0                            | 0                                 | 1                                      | 0                      | 0                    | 0              | 2      |
| TIA - Vietnam                       | 29                 | 5                  | 47                           | 10                                | 80                                     | 13                     | 23                   | 39             | 246    |
| AA - Central America                | 39                 | 3                  | 36                           | 16                                | 88                                     | 11                     | 20                   | 45             | 258    |
| EPA - CARIFORUM                     | 31                 | 6                  | 33                           | 6                                 | 110                                    | 3                      | 10                   | 17             | 216    |
| EU GSP                              | 0                  | 0                  | 0                            | 0                                 | 4                                      | 2                      | 2                    | 17             | 25     |
| Totals                              | 144                | 68                 | 158                          | 53                                | 598                                    | 64                     | 184                  | 212            | 1481   |

## 4. Links between VSS and the SDGs

### 4.1 Introduction

Besides the mandatory public standards and regulations focussing on sustainability, Voluntary Sustainability Standards (VSS) have also gained tremendous importance in global agricultural trade (Daviron and Vagneron, 2011; Derkx and Glasbergen, 2014; Muradian and Pelupessy, 2005). This has been in line with the evolving global sustainability and development agendas such as the Rio Earth summit in 1992, the Millennium Development Goals introduced in 2000 and the adoption of the SDGs in 2015 (Blankenbach, 2020).

The first VSS were launched in the fields of agriculture and forestry and included the Forest Stewardship Council, Rainforest Alliance and Fairtrade International (UNFSS, 2018). As of 2022, the database on VSS of the International Trade Centre (ITC – Standards Map) counts 313 different standards applicable to a wide range of products and countries.

A study by the ITC (2016) found the following stylised facts regarding the emergence of VSS:

- The first VSS were initialised in developed countries but the number of VSS coming from large developing countries is increasing.
- There are few VSS with a global coverage and most of the standards focus on high-income countries as the demand for sustainably produced goods is higher.
- The sectoral scope of VSS is most frequently on extraction and primary production.
- The number of VSS that specifically target SMME's, and small-scale producers is relatively small

There are a variety of non-governmental actors that drive the development of VSS, including NGO's/civil society (e.g., Clean Clothes Campaign), industry consortia (e.g., GlobalGAP) and individual firms (e.g., Unilever Sustainable Agriculture Code). In many instances the public sector has provided support to these sustainability programs (UNFSS, 2018).

VSS are generally defined by a set of product and production requirements to support its respective aims (Blankenbach, 2020). In international accountability terms, we can distinguish such standards with respect to (i.) principle-based standards (e.g., United Nations Global Compact, UNGC), (ii.) certification-based standards (e.g. ISO 14001) and (iii.) reporting-based standards (e.g. GRI's Sustainability Reporting Guidelines) (Behnam and MacLean, 2011). These VSS also comprise of very distinct process criteria in terms of verification, certification, marketing, support, revision,

and governance. An independent verification and certification system ensures compliance with a VSS (Potts *et al.*, 2014), while effective involvement of public sector and civil society stakeholders should be an integral part of the accompanying governance process for achieving good governance on sustainability (dos Santos *et al.*, 2020).

As the term implies, for a producer / export the compliance with a VSS is not mandatory. Nevertheless, demand-led pressure from buyers in the importing market can imply that a VSS is perceived as a market entry requirement. Furthermore, a producer / exporter must be able to recover its cost of compliance and certification. On the other hand, and besides the greater societal benefits of more sustainable production and trade practices, the rewards for individual producers / exporters to comply with a VSS may include (Brauman and Viart, 2016):

- Price premiums
- Greater market access
- Local norms and a culture of sustainability, and
- Production training and support

As mentioned in Section 1, there are a myriad of VSS in the EU which may be of importance to agricultural producers and exporters from developing countries. Table 2 provides an overview of these with regards to their geographical context as well as the sustainability themes they address. As there is overlap between the different VSS in terms of geographical coverage and themes, the rows and columns do not add up.

The table shows that most of the agricultural VSS in the EU are applicable to exporters from South America, followed by Asia. Furthermore, most of the VSS focus on social and management/ethics themes. Environmental themes are relative few within this specific set of VSS.

Table 2: Scope of agricultural VSS in the EU

| Exporter                    | Total | Sustainability themes |        |                       |         |
|-----------------------------|-------|-----------------------|--------|-----------------------|---------|
|                             |       | Environment           | Social | Management and Ethics | Quality |
| Africa                      | 67    | 13                    | 47     | 41                    | 10      |
| Asia                        | 78    | 12                    | 52     | 43                    | 11      |
| Central America & Caribbean | 53    | 12                    | 37     | 31                    | 10      |
| South America               | 84    | 15                    | 60     | 49                    | 12      |
| Total VSS                   | 119   |                       |        |                       |         |

Source: ITC (2022)

A sectoral overview of the total VSS prevalent in the EU market is shown in Figure 4. It is evident that most of the standards focus on the manufacturing sector (this

includes food processing) followed by agriculture. The mining and chemicals sectors face relative few VSS in the EU market.

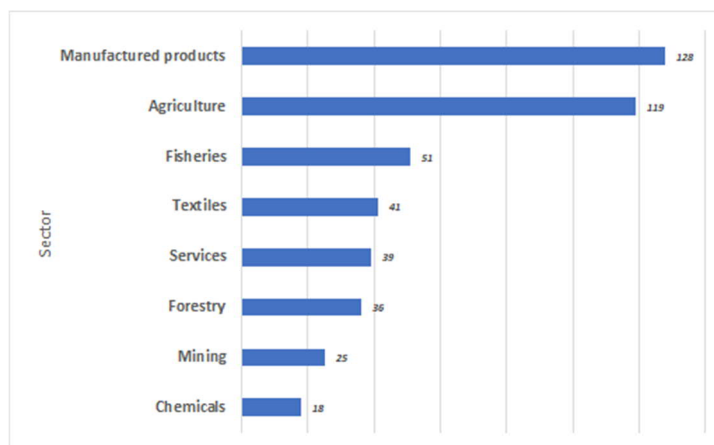


Figure 4: Number of VSS in the EU per sector in the EU market  
Source: ITC (2022)

Few studies have analysed the alignment of VSS with the SDGs. Blankenbach (2020) analysed a set of the 16 most important VSS applicable to agriculture, forestry, and biofuels with a global scope. He noticed that SDGs are much broader in their scope and wording than the detailed requirements of VSS. The study found the highest level of alignment with SDG2 (zero hunger), SDG8 (decent work and economic growth) and SDG 12 (sustainable production and consumption). Areas with less alignment were poverty reduction (SDG1), climate change (SDG13), health (SDG3) and gender (SDG5).

In another study, UNFSS (2018) analysed the linkage of 122 VSS with ten selected SDGs. This study also found a relative high level of complementarity between the VSS and SDG8 and SDG12 as well as SDG15 (life on land). On the contrary, this study found that SDG2 (zero hunger) is less well covered by the set of 122 VSS.

The most comprehensive study on SDGs and VSS to date has been conducted by Bissinger, K., Brandi, C., Cabrera de Leicht, S., Fiorini, M., Schleifer, P., Fernandez de Cordova, S., and Ahmed, N. (2020). This study maps the linkage between a set of 232 VSS and all 17 SDGs. The data of this study was used for the subsequent analyses in this report.

## 4.2 Approach

The study by Bissinger *et al.* (2020) mapped more than 800 VSS requirements as captured in their Standards Map database and linked these with the 126 core targets of the SDGs. A linkage to a specific SDG target was established when the VSS criteria and actions are relevant for achieving the target.

In order for a linkage to be included in the analysis it had to meet two criteria (Bissinger, 2020):

- The content of the VSS requirement must be described with a high or medium level of precisions.
- The content of the VSS requirement must show high correspondence with the content of the SDG.

Based on these criteria, only “relevant” VSS criteria were linked with the SDG targets. The ITC (2020) mapping used a “linkage” indicator to quantify the SDG coverage of the VSS requirements. This indicator will be the highest if a VSS covers all the requirements of an SDG target and zero of none of the requirements are linked.

### 4.3 Results

This sub-section will present some of the data derived from the ITC (2020) study. To provide some context, Figure 5 shows the number of VSS that link with each of the SDGs. In total 222 of the VSS, which is almost all standards in the sample, link with SDG8. The figure shows that vast proportion of the VSS, at least 180, link with a broad range of SDGs: 1, 2, 3, 4, 6, 8, 11 and 12. Only SDGs 13 and SDG14 have a weak coverage in the VSS. No linkages could be established for SDG17, but this goal is mainly addressed by governments.

The figure also highlights the SDGs specifically aligned with the MATS project scope.

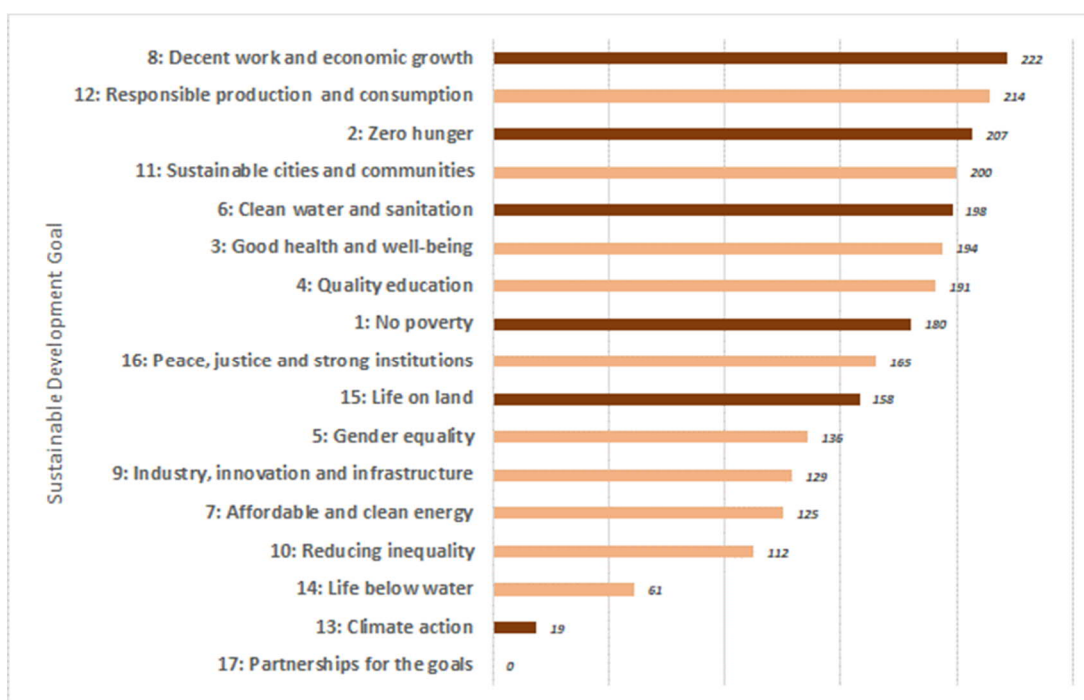


Figure 5: Number of VSS with linkages to the 17 SDGs  
Source: Bissinger et al. (2020)



Figure 6 narrows down the previous figure in that it only includes VSS applicable to agricultural products. Most of these VSS are linked to SDG16 (peace / justice / institutions), SDG4 (education) and SDG10 (inequality). Given the scope, one would expect stronger linkages of these specific VSS with SDG2 (zero hunger) and SDG15 (life on land).

The figure also shows that the SDGs that form part of the MATS project scope feature less prominent in this set of VSS.

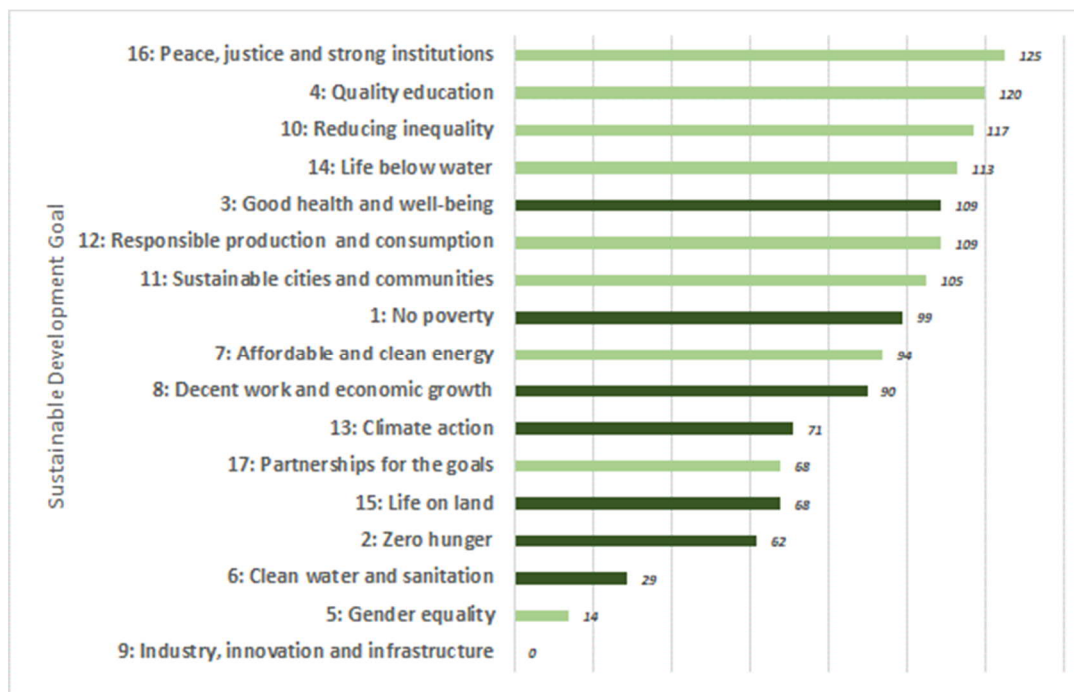


Figure 6: Number of agricultural VSS with linkages to the 17 SDGs  
Source: Bissinger et al. (2020)

It is evident that there are clear differences between the two previous figures. This variance in scope between all VSS and agricultural VSS is further explored in Figure 7. It shows the difference in ranking with regards to the number of VSS per SDG. The first eight SDGs in the figure rank lower in the agricultural VSS. SDG1 ranks the same in both sets of VSS and the bottom eight SDGs rank higher for agricultural VSS.

This pattern is quite remarkable as some of the SDGs which one would not directly link with agricultural VSS rank relatively high, for instance SDG14 (life below water), SDG16 (peace / justice / institutions) and SDG4 (education). Hence, this would require a deeper analysis beyond the scope of this report.

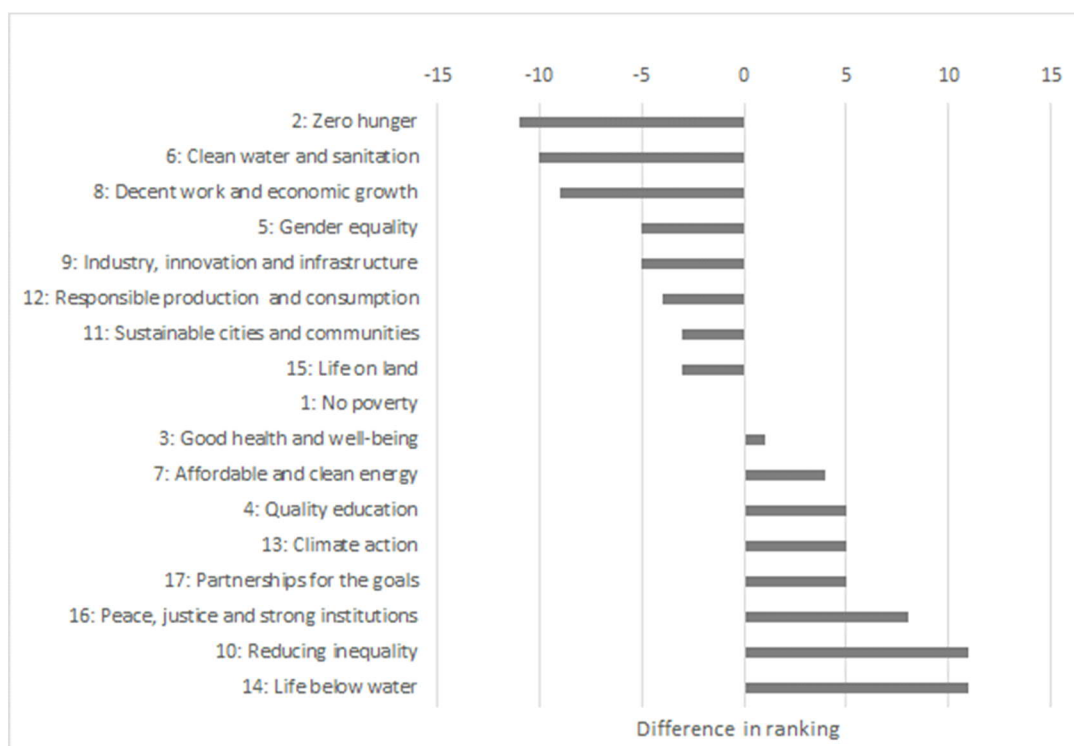


Figure 7: Differences in SDG linkages between all and agricultural VSS  
Source: Author's own calculation using data from ITC (2022)

To provide more details in terms of the individual VSS that link to each of the SDGs, the graphs in Annex 3 show the top 15 VSS with the highest proportional coverage of the SDGs of the MATS project scope (SDGs 1, 2, 3, 6, 8, 13 and 15). From this analysis it became evident that “Floverde Sustainable Flowers” has the broadest coverage as it links with all seven SDGs, followed by the “International Sustainability & Carbon Certification EU / PLUS (ISCC EU/PLUS)” and “Sustainably Grown” with links to six SDGs. In total, a set of 55 VSS were identified of which the majority (37) only had one SDG linkage.

## 5. Conclusions

It has become evident from the analyses that trade rules between the EU and developing countries de facto address some of the SDGs. It is evident that trade rules are indirectly supportive of a specific range of SDGs. A summary of this is provided in Table 3.

The top part of the table shows the three SDGs with the strongest linkage for each type of trade rule. The table shows that there is not much overlapping in terms of SDG coverage. Only SDG3 (highlighted in green) is well linked with EU NTMs and trade agreements. The SDGs highlighted in orange show a mixed picture in terms of their linkages. SDG2 is well covered by EU NTMs, but poorly covered in EU trade agreements on the other hand. A similar pattern exists for SDG15, which is relatively poorly covered in the EU NTMs but relatively well-linked with the selected EU Trade Agreements on the other hand.

Table 2: Overview of the SDGs linkages of the different EU trade rules

|  | EU NTMs   | EU Trade Agreements                             | Agricultural VSS   |
|--|---|---|--|
| Highest SDG coverage                         | <i>SDG 3</i><br>Health and wellbeing                    | <i>SDG 8</i><br>Decent work and economic growth | <i>SDG 16</i><br>Peace, justice, and strong institutions |
|  | <i>SDG 12</i><br>Responsible production and consumption | <i>SDG 15</i><br>Life on land                   | <i>SDG 4</i><br>Quality education                        |
|  | <i>SDG 2</i><br>Zero hunger                             | <i>SDG 3</i><br>Health and wellbeing            | <i>SDG 10</i><br>Reducing inequality                     |
| Lowest SDG coverage                          | <i>SDG 15</i><br>Life on land                           | <i>SDG 6</i><br>Clean water and sanitation      | <i>SDG 9</i><br>Industry and infrastructure              |
|  | <i>SDG 6</i><br>Clean water and sanitation              | <i>SDG 13</i><br>Climate action                 | <i>SDG 5</i><br>Gender equality                          |
|  | <i>SDG 14</i><br>Life below water                       | <i>SDG 2</i><br>Zero hunger                     | <i>SDG 6</i><br>Clean water and sanitation               |
| SDGs with an above average coverage (sample) | 3(17)   | 2(7)  | 10(17)   |

The bottom part of Table 1 shows the three SDGs with the lowest level of coverage with these trade rules. This is also a relative mixed set of SDGs. The table depicts that SDG6 is the least covered by all three types of trade rules in the EU.

The last row in the table shows the concentration of the linkages between the SDGs and the trade rules. The value indicates the number of SDGs with an above average coverage in each of the three EU trade rules. The value in brackets indicates the number of SDGs included in the analyses.

The values for EU NTMs and the selected EU trade agreements are relatively low. This indicates that the linkages or have a relative strong focus on a limited set of SDGs. The value for the VSS is higher, implying that they focus on a broader range of SDGs.

The core aim of VSS is sustainable development which directly aligns with the objective of the SDGs. Hence, a vast amount of VSS link with a broad set of SDGs. The linkages between NTMs and trade agreements are more concentrated as these specific types of trade rules are primarily aimed at facilitating trade, and although of increasing importance, sustainable development is secondary.

The contribution of the analyses of T1.3 to the other work packages of the MATS project may include:

- WP2 – Frameworks, indicators, and tools: relevant literature on the relationship between trade and sustainability.
- WP3 – Assessing linkages: providing context for the case studies from a trade rules perspective.
- WP4 - Institutional, regulatory, and legal frameworks: providing context / relevant literature on trade agreements and sustainable development.
- WP5 - Transition pathways and policy recommendations: providing context

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# Annex

## Annex 1a: Overview of selected EU - Africa trade agreements

| Agreement                             | Countries     | Type                                   | Status                | Year |
|---------------------------------------|---------------|--|-----------------------|------|
| Euro-Mediterranean Agreement          | Algeria       | Association Agreement                  | Signed / in force     | 2005 |
| Euro-Mediterranean Agreement          | Egypt         | Association Agreement                  | Signed / in force     | 2004 |
| Euro-Mediterranean Agreement          | Tunisia       | Association Agreement                  | Signed / in force     | 1998 |
| Euro-Mediterranean Agreement          | Morocco       | Association Agreement                  | Signed / in force     | 1996 |
| EPA EU – Central Africa               | Cameroon      | Interim Economic Partnership Agreement | Ratified              | 2014 |
| EPA EU – West Africa                  | Côte d'Ivoire | Steppingstone agreement                | Provisionally applied | 2016 |
| EPA EU – West Africa                  | Ghana         | Steppingstone agreement                | Provisionally applied | 2016 |
| EPA EU – West Africa (ECOWAS / WAEMU) | Benin         | Economic Partnership Agreement         | Initialised           | NA   |
|                                       | Burkina Faso  |  |                       |      |
|                                       | Cape Verde    |  |                       |      |
|                                       | Gambia        |  |                       |      |
|                                       | Guinea,       |  |                       |      |
|                                       | Guinea-Bissau |  |                       |      |
|                                       | Liberia       |  |                       |      |
|                                       | Mali          |  |                       |      |
|                                       | Niger         |  |                       |      |
|                                       | Senegal       |  |                       |      |
|                                       | Sierra Leone  |  |                       |      |
|                                       | Togo          |  |                       |      |
|                                       | Mauritania    |  |                       |      |
| EPA EU – SADC                         | Botswana      | Economic Partnership Agreement         | Signed / in force     | 2016 |
|                                       | Lesotho       |  |                       |      |
|                                       | Mozambique    |  |                       |      |
|                                       | Namibia       |  |                       |      |
|                                       | Swaziland     |  |                       |      |
|                                       | South Africa  |  |                       |      |

|                                      |            |  |                       |      |
|--------------------------------------|------------|--|-----------------------|------|
| EPA EU - Eastern and Southern Africa | Comoros    | Interim Economic Partnership Agreement | Provisionally applied | 2013 |
|                                      | Madagascar |  |                       |      |
|                                      | Mauritius  |  |                       |      |
|                                      | Seychelles |  |                       |      |
|                                      | Zimbabwe   |  |                       |      |
| EPA EU – Eastern African Community   | Burundi    | Economic Partnership Agreement         | Initialised           | 2014 |
|                                      | Kenya      |  |                       |      |
|                                      | Rwanda     |  |                       |      |
|                                      | Tanzania   |  |                       |      |
|                                      | Uganda     |  |                       |      |

#### Annex 1b: Overview of selected EU - Asia trade agreements

| Agreement   | Countries        | Type                           | Status            | Year        |
|---|------------------|--------------------------------|-------------------|-------------|
| Vietnam - Trade and Investment Agreement            | Vietnam          | Trade and Investment Agreement | Signed / in force | 2020        |
| EPA EU – Pacific                                    | Papua New Guinea | Economic Partnership Agreement | Ratified          | 2011 - 2020 |
|   | Fiji             |                                |                   |             |
|   | Samoa            |                                |                   |             |
|   | Solomon Islands  |                                |                   |             |
|   | Tonga            |                                |                   |             |
| Indonesia - Partnership and Cooperation Agreement   | Indonesia        | Framework agreement            | Signed / in force | 2017 - 2021 |
| EU-Indonesia FTA                                    | Indonesia        | Proposals                      | Under negotiation | 2020        |
| Philippines - Partnership and Cooperation Agreement | Philippines      | Framework agreement            | Signed / in force | 2018        |

## Annex 1c: Overview of selected EU – Latin America & the Caribbean trade agreements

| Agreement                                  | Countries                        | Type                           | Status                | Year |
|--|----------------------------------|--------------------------------|-----------------------|------|
| EPA EU- CARIFORUM                          | Antigua and Barbuda              | Economic Partnership Agreement | Signed / in force     | 2008 |
|  | The Bahamas                      |                                |                       |      |
|  | Barbados                         |                                |                       |      |
|  | Belize                           |                                |                       |      |
|  | Dominica                         |                                |                       |      |
|  | Grenada                          |                                |                       |      |
|  | Guyana                           |                                |                       |      |
|  | Jamaica                          |                                |                       |      |
|  | Saint Lucia                      |                                |                       |      |
|  | Saint Vincent and the Grenadines |                                |                       |      |
|  | Saint Kitts and Nevis            |                                |                       |      |
|  | Suriname                         |                                |                       |      |
|  | Trinidad and Tobago              |                                |                       |      |
|  | the Dominican Republic           |                                |                       |      |
|  | Haiti                            |                                |                       |      |
| EU - Central America Association Agreement | Honduras                         | Association Agreement          | Provisionally applied | 2013 |
|  | Nicaragua                        |                                |                       |      |
|  | Panama                           |                                |                       |      |
|  | Guatemala                        |                                |                       |      |

## Annex 1d: Overview of the agreement of the EU Generalised System of Preferences (GSP)

| Agreement | Countries    | Type                   | Status            | Year |
|-----------|--------------|------------------------|-------------------|------|
| GSP       | Congo        | Unilateral arrangement | Signed / in force | 2014 |
|           | Cook Islands |                        |                   |      |
|           | India        |                        |                   |      |
|           | Indonesia    |                        |                   |      |
|           | Kenya        |                        |                   |      |
|           | Micronesia   |                        |                   |      |
|           | Nauru        |                        |                   |      |
|           | Nigeria      |                        |                   |      |
|           | Niue         |                        |                   |      |
|           | Samoa        |                        |                   |      |
|           | Syria        |                        |                   |      |
|           | Tajikistan   |                        |                   |      |
|           | Tonga        |                        |                   |      |
|           | Uzbekistan   |                        |                   |      |
|           | Vietnam      |                        |                   |      |
| GSP+      | Armenia      | Unilateral arrangement | Signed / in force | 2014 |
|           | Bolivia      |                        |                   |      |
|           | Cape Verde   |                        |                   |      |
|           | Kyrgyzstan   |                        |                   |      |
|           | Mongolia     |                        |                   |      |
|           | Pakistan     |                        |                   |      |
|           | Philippines  |                        |                   |      |
|           | Sri Lanka    |                        |                   |      |
| EBA       | Afghanistan  | Unilateral arrangement | Signed / in force | 2014 |
|           | Angola       |                        |                   |      |
|           | Bangladesh   |                        |                   |      |
|           | Benin        |                        |                   |      |
|           | Bhutan       |                        |                   |      |
|           | Burkina Faso |                        |                   |      |
|           | Burundi      |                        |                   |      |

|  |                      |  |  |
|--|----------------------|--|--|
|  | Cambodia             |  |  |
|  | Central African Rep. |  |  |
|  | Chad                 |  |  |
|  | Comoros              |  |  |
|  | Congo (DRC)          |  |  |
|  | Djibouti             |  |  |
|  | Equatorial Guinea    |  |  |
|  | Eritrea              |  |  |
|  | Ethiopia             |  |  |
|  | Gambia               |  |  |
|  | Guinea               |  |  |
|  | Guinea-Bissau        |  |  |
|  | Haiti                |  |  |
|  | Kiribati             |  |  |
|  | Lao PDR              |  |  |
|  | Lesotho              |  |  |
|  | Liberia              |  |  |
|  | Madagascar           |  |  |
|  | Malawi               |  |  |
|  | Mali                 |  |  |
|  | Mauritania           |  |  |
|  | Mozambique           |  |  |
|  | Myanmar/Burma        |  |  |
|  | Nepal                |  |  |
|  | Niger                |  |  |
|  | Rwanda               |  |  |
|  | Sao Tome & Principe  |  |  |
|  | Senegal              |  |  |
|  | Sierra Leone         |  |  |
|  | Solomon Islands      |  |  |
|  | Somalia              |  |  |

|  |             |  |  |  |
|--|-------------|--|--|--|
|  | South Sudan |  |  |  |
|  | Sudan       |  |  |  |
|  | Tanzania    |  |  |  |
|  | Timor-Leste |  |  |  |
|  | Togo        |  |  |  |
|  | Tuvalu      |  |  |  |
|  | Uganda      |  |  |  |
|  | Vanuatu     |  |  |  |
|  | Yemen       |  |  |  |
|  | Zambia      |  |  |  |



## Annex 2: Key terms of the selected SDG's

| Goals  | Targets   | Key terms   |
|--|---|---|
| SDG  |   | sustainable development   |
| 1. End poverty in all its forms everywhere   |   | end poverty<br>poverty<br>extreme poverty<br>social protection<br>equal rights to economic resources<br>land ownership<br>property ownership<br>financial services<br>microfinance<br>economic shocks<br>pro-poor development strategies<br>poverty eradication   |
|  | <p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</p> <p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p> <p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters</p> <p>1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions</p> <p>1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</p> |   |
| 2. End hunger, achieve food security and improved nutrition and promote sustain-able agriculture |   | hunger<br>end hunger<br>food security<br>improved nutrition<br>nutrition<br>sustainable agriculture<br>access to food<br>sufficient food<br>safe food<br>nutritious food<br>malnutrition<br>agricultural productivity<br>rural infrastructure<br>agricultural research<br>extension services<br>agricultural export subsidies |
|  | <p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons</p> <p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that</p>  |   |

|  |   |  |
|--|---|--|
|  | <p><i>help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</i></p> <p><i>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</i></p> <p><i>2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</i></p> <p><i>2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round</i></p> <p><i>2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility</i></p> | <p>functioning food commodity markets</p> <p>food price volatility</p>   |
| 3. Ensure healthy lives and promote well-being for all at all ages |   | <p>public health</p> <p>healthy lives</p> <p>wellbeing</p> <p>maternal mortality</p> <p>neonatal mortality</p> <p>AIDS</p> <p>tuberculosis</p> <p>malaria</p> <p>premature mortality</p> <p>mental health</p> <p>substance abuse</p> <p>road traffic incidents</p> <p>healthcare</p> <p>reproductive healthcare</p> <p>health coverage</p> <p>medicines</p> <p>vaccines</p> <p>pollution</p> <p>tobacco control</p> <p>diseases</p> <p>TRIPS agreement</p> <p>health financing</p> <p>health workers</p> <p>health workforce</p> |
|  | <p><i>3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</i></p> <p><i>3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</i></p> <p><i>3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</i></p> <p><i>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</i></p> <p><i>3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol</i></p> <p><i>3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents</i></p> <p><i>3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</i></p> <p><i>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</i></p>  |  |

|   |  |   |
|---|--|---|
|   | <p><i>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</i></p> <p><i>3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate</i></p> <p><i>3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all</i></p> <p><i>3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</i></p> <p><i>3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</i></p>   | health risks  |
| 6. Ensure availability and sustainable management of water and sanitation for all |  | water management<br>sanitation<br>clean water   |
|   | <p><i>6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all</i></p> <p><i>6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations</i></p> <p><i>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</i></p> <p><i>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</i></p> <p><i>6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate</i></p> <p><i>6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes</i></p> <p><i>6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling, and reuse technologies</i></p> <p><i>6.b Support and strengthen the participation of local communities in improving water and sanitation management</i></p> | drinking water<br>water quality<br>water pollution<br>wastewater<br>fresh water<br>water use<br>water supply<br>water scarcity<br>water ecosystems<br>rivers<br>lakes<br>wetlands<br>water harvesting<br>desalination |

|   |  |  |
|---|--|--|
| 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all |  | economic growth<br>workers<br>labour<br>employment<br>decent work<br>productivity<br>diversification<br>innovation<br>value adding<br>job creation<br>entrepreneurship<br>SMME's<br>production<br>consumption<br>equal pay<br>unemployment<br>modern slavery<br>forced labour<br>labour rights<br>working environment<br>migrant workers<br>child labour<br>aid for trade<br>international labour organization |
|   | 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries  |  |
|   | 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors   |  |
|   | 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services                              |  |
|   | 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead |  |
|   | 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value   |  |
|   | 8.6 By 2020, substantially reduce the proportion of youth not in employment, education, or training  |  |
|   | 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms                           |  |
|   | 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment  |  |
|   | 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products  |  |
|   | 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all  |  |
|   | 8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries  |  |
|   | 8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization   |  |
| 13. Take urgent action to combat climate change and its impact  |  | climate change<br>climate<br>natural disasters<br>climate policies   |
|   | 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries   |  |

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|   | <p>13.2 <i>Integrate climate change measures into national policies, strategies and planning</i></p> <p>13.3 <i>Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</i></p> <p>13.a <i>Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible</i></p> <p>13.b <i>Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth, and local and marginalized communities.</i></p>   | <p>climate policy</p> <p>climate change mitigation</p> <p>climate change adaptation</p>  |
| 15. Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss |   | <p>ecosystems</p> <p>forests</p> <p>desertification</p> <p>land degradation</p> <p>biodiversity</p> <p>conservation</p> <p>deforestation</p> <p>afforestation</p> <p>reforestation</p> <p>droughts</p> <p>floods</p> <p>extinction</p> <p>genetic resources</p> <p>poaching</p> <p>protected species</p> <p>flora</p> <p>fauna</p> <p>wildlife</p> <p>invasive species</p> |
|   | <p>15.1 <i>By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</i></p> <p>15.2 <i>By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</i></p> <p>15.3 <i>By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</i></p> <p>15.4 <i>By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</i></p> <p>15.5 <i>Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</i></p> <p>15.6 <i>Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</i></p> <p>15.7 <i>Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products</i></p> <p>15.8 <i>By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</i></p> |  |

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|  | <i>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</i>   |  |
|  | <i>15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems</i>  |  |
|  | <i>15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation</i> |  |
|  | <i>15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities</i>  |  |

### Annex 3: Top 15 VSS most linked to the selected SDG

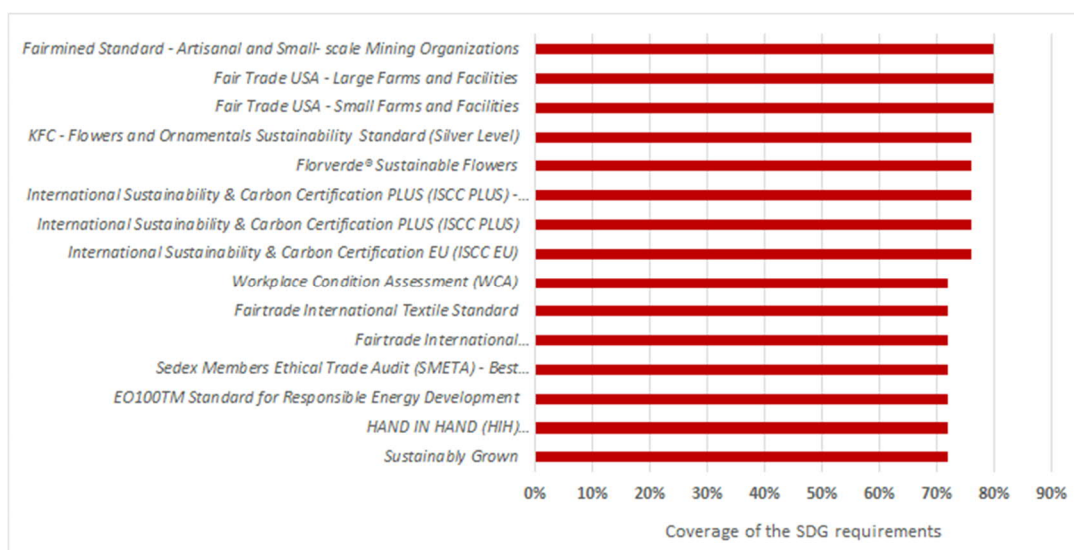


Figure A3-1: VSS most linked with SDG 1 – no poverty  
Source: Bissinger et al. (2020)

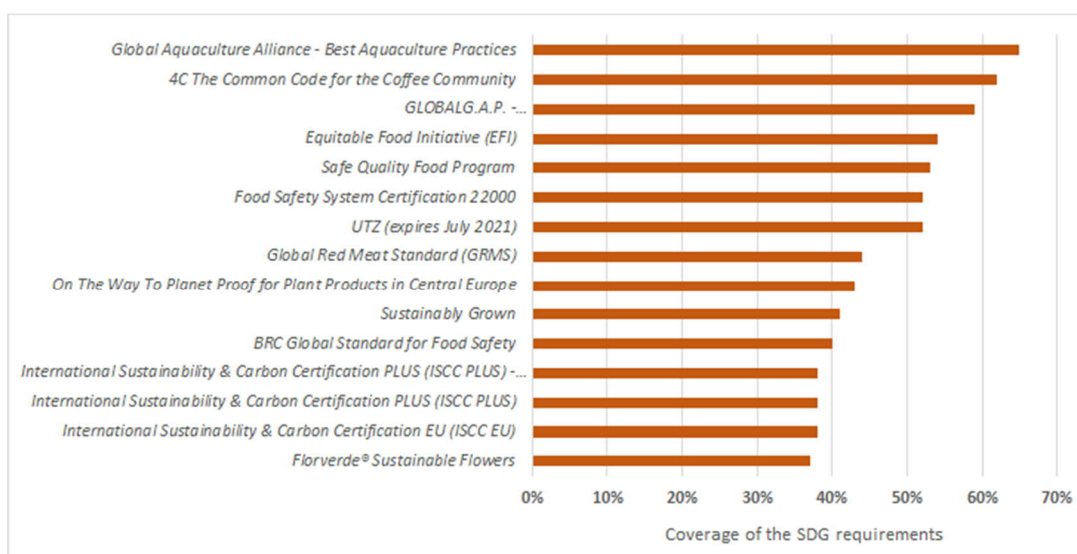


Figure A3-2: VSS most linked with SDG 2 – zero hunger  
Source: Bissinger et al. (2020)



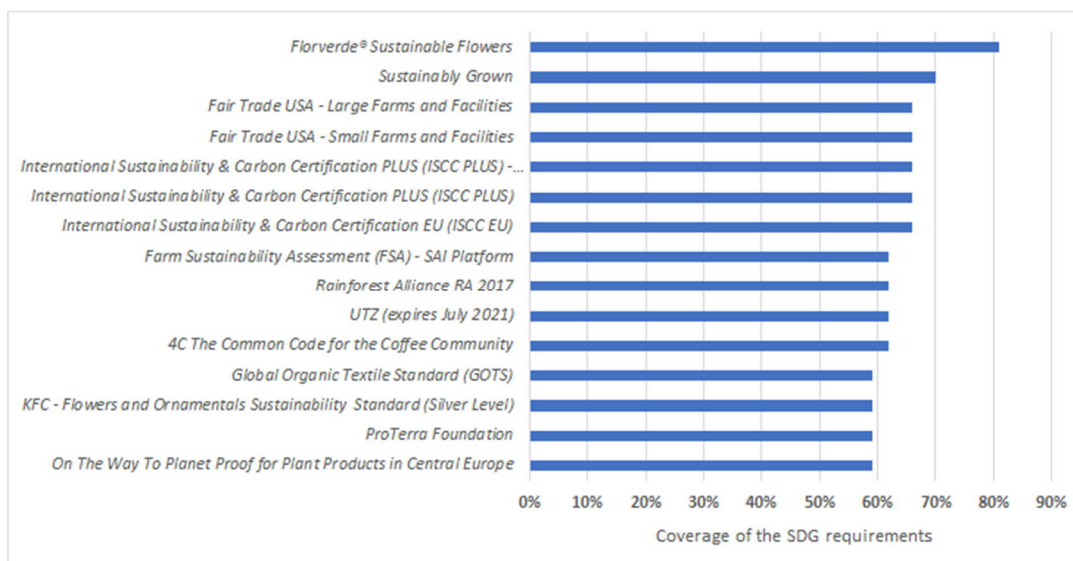


Figure A3-3: VSS most linked with SDG 3 – good health and well-being  
Source: Bissinger et al. (2020)

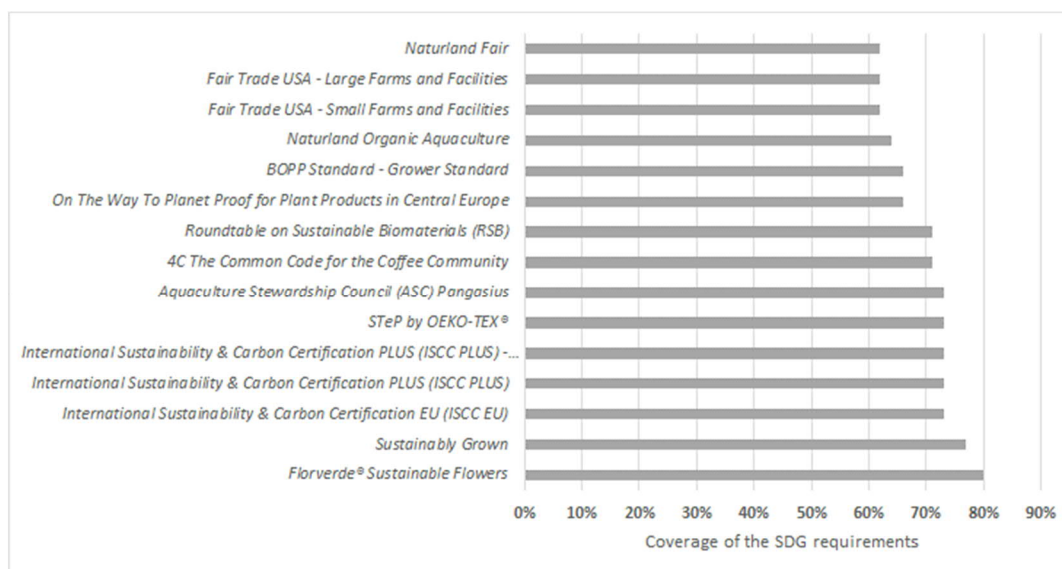


Figure A3-4: VSS most linked with SDG 6 – clean water and sanitation  
Source: Bissinger et al. (2020)

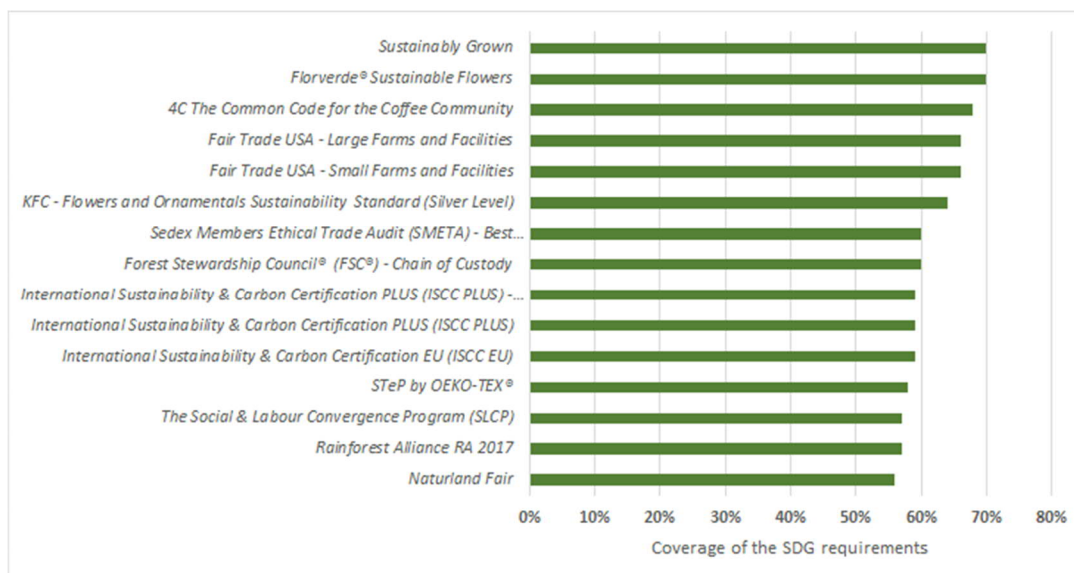


Figure A3-5: VSS most linked with SDG 8 – Decent work and economic growth  
Source: Bissinger et al. (2020)

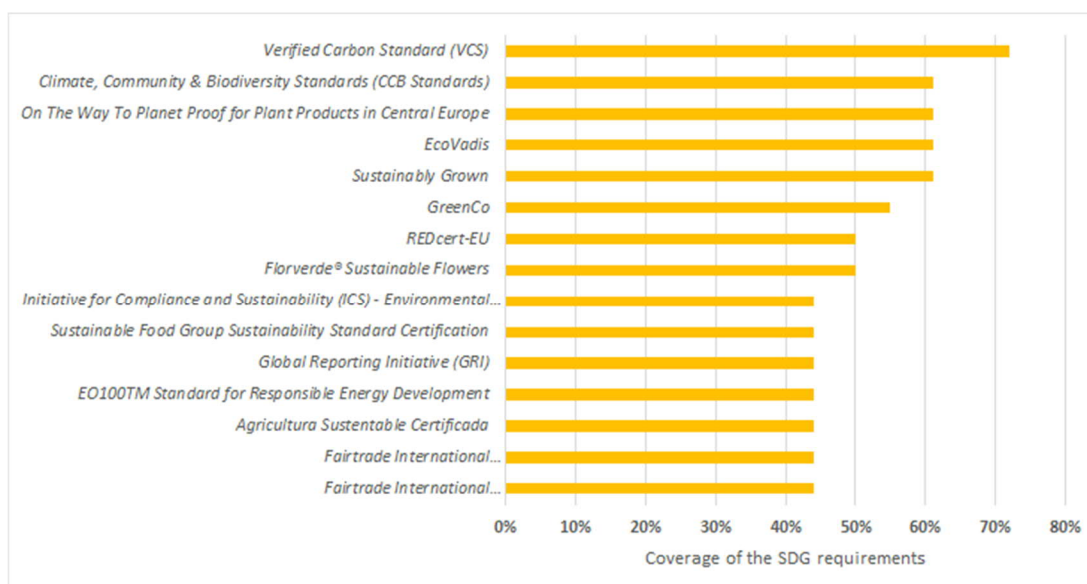


Figure A3-6: VSS most linked with SDG 13 – Climate action  
Source: Bissinger et al. (2020)

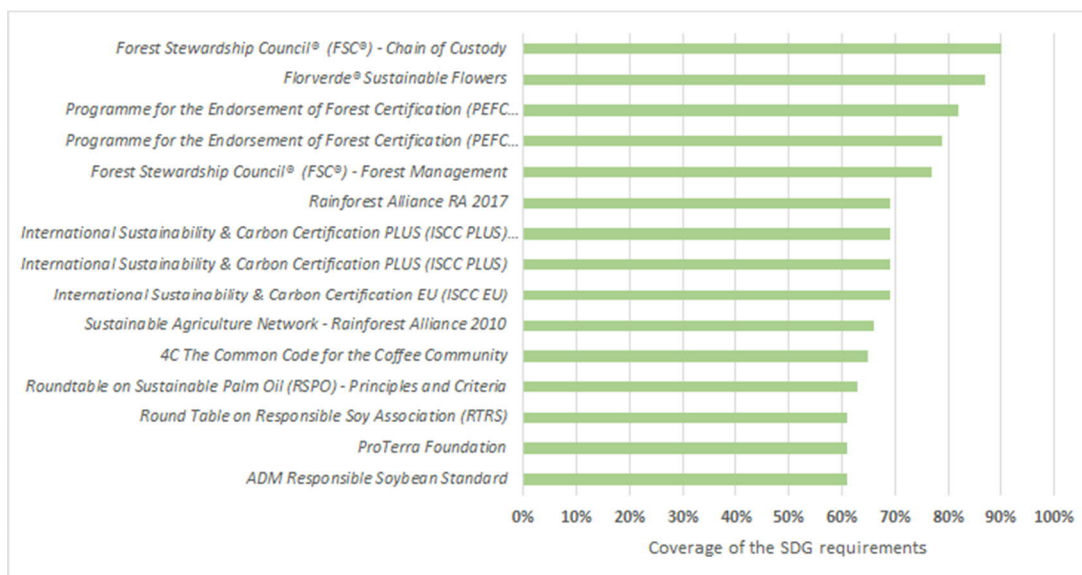


Figure A3-7: VSS most linked with SDG 15 – Life on land  
Source: Bissinger et al. (2020)