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Deliverable 2.2:

1 synthesis report on how the Sustainable Development Goals are currently included in preferential agreements and how are sustainability provision working;
3 short reports on case studies (Vietnam, Ghana and Tunisia)



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**Synthesis report on how the Sustainable Development Goals
are currently included in preferential agreements and how are
sustainability provision working**

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Synthesis report on how the Sustainable Development Goals are currently included in preferential agreements and how are sustainability provision working

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1. European Union’s trade agreements and the Sustainable Development Goals

Preferential Trade Agreements (PTAs) are designed to promote trade and economic cooperation between the participating countries by offering advantages such as reduced tariffs or other trade-related benefits. PTAs have notably increased their prominence over the past few decades, resulting in the involvement of all World Trade Organization (WTO) members in at least one, and often multiple agreements (Mattoo et al., 2020). PTAs have progressively started to include provisions that cover a wide range of trade-related policy, going from an average of 8 in the 1950s to 17 in recent years, including policy areas such as environment, labour rights, investments, intellectual property rights, and migration. These provisions can be used as targeted policy tools to step forward in reaching the United Nations Sustainable Development Goals (SDGs). The underlying concept is that international trade, through the regulation of the behaviour of exporting countries, may have a positive impact on sensitive sustainability issues. The European Union (EU) uses trade policy to achieve the 2030 SDGs and promote the transfer of norms and values such as social, consumer and environmental standards, as well as cultural diversity. This initiative is part of the EU’s larger strategy, which includes the *Green Deal* and *Trade for all* communications, aimed at promoting sustainable growth and improving the overall quality of life. They also provide an important platform to monitor commitments to human, labour, and environmental rights in trade agreements.

The EU plays a crucial role in international trade relations, and it utilizes trade agreements as a tool to promote sustainable development, especially in its trade dealings with developing countries (European Commission’s publications in 2006, 2012, and 2015). This strategy can help promote sustainable development practices worldwide and gain popular support for an open international trading system within the EU (Bastiaens and Postnikov, 2019). Sustainable development provisions have now become an essential component of the EU’s new generation of trade agreements. The “new generation” of Free Trade Agreements (FTAs) contains a specific Trade and Sustainable Development (TSD) Chapter which is based on three pillars: binding commitments to labour and environmental standards, structures to involve civil society organizations and a dedicated dispute settlement mechanism. Different empirical works show that there is significant variation in the way these provisions are designed within the PTAs with developing countries, especially when it comes to their level of bindingness, enforceability, and transparency (Adriansen and González-Garibay, 2013; Poletti and Sicurelli, 2018; Harrison et al., 2019).

The literature on trade and sustainable development can be broadly categorized into two opposing views. Some authors believe that the EU is too tolerant in its approach to international trade. The EU is, in fact, considered as relatively non-protectionist, as evidenced by the imbalance generated by the agreements, in which provisions are not

uniform and differ from Member States (Poletti et al, 2021). Some argue that sustainability provisions are only superficial measures to make new FTAs more appealing to European consumers and citizens who are concerned that trade liberalization could lead to reduced social and environmental safeguards (Bastiaens and Postnikov, 2019). On the other hand, some critics argue that the EU uses sustainability arguments to hide its protectionist agenda and shield its economy from cheap imports, instead of liberalising its economy through FTAs (Poletti et al., 2021). Regarding the agricultural sector, for instance, dispute arises between the EU and WTO concerning trade liberalisation as the EU upholds significantly higher tariffs than those recommended by the WTO (Borowicz and Daugėlienė, 2023). The EU takes measures to prevent its trading partners from using lower social and environmental standards as a competitive advantage. Developing countries often agree to TSD Chapters to gain access to the EU market, but they do not always fully commit to Sustainable Development.

Since 1995, the EU has incorporated a human rights clause in all its trade, cooperation, partnership, and association agreements, except those of the WTO. This clause defines respect for fundamental human rights, including core labour rights, as an “essential element” of the agreement (Pham, 2017). The EU prioritizes ensuring that its trading partners adhere to the provisions on core labour standards such as the elimination of child labour, workers’ rights, and non-discrimination in the workplace. The EU provides additional tariff preferences to countries that effectively implement core United Nations/International Labour Organization human/labour rights Conventions, instead of relying on a trade sanctions-based approach to social and labour standards such as Generalised Scheme of Preferences (GSP) or GSP Plus. To combat violations of labour rights, the most stringent enforcement measures include withdrawing development funds or taking “appropriate measures”, such as suspending the agreement in full or in part (Portela, 2018; Pham, 2017). If a partner country that has violated labour rights fails to bring about satisfactory change in its human rights record, these measures may be taken following a consultation procedure (Pham, 2017).

Over the last two decades, there has been a noticeable increase in the inclusion of environmental and social provisions in PTAs as more than 60% of new agreements that entered into force include these provisions (Fernandes et al., 2023). Specifically, environmental provisions went from being less than 50 in 1990 to more than 350 today (Rocha and Fernandez, 2023). On average, each trade agreement includes 60 different kinds of environmental provisions, which are part of 85% of all trade agreements (TREND Analytics, 2017).

The EU trade agreements in force with rules on TSD are listed in table 1.

Table 1: EU Trade Agreements in force with TSD

Countries	TSD Chapters
Canada	Chapters 22, 23, 24
Central America	Title VIII
Colombia, Peru, and Ecuador	Title IX
Georgia	Chapter 13
Japan	Chapter 16
Moldova	Chapter 13
Singapore	Chapter 12
South Korea	Chapter 13
Ukraine	Chapter 13
United Kingdom	Chapters 6, 7, 8
Vietnam	Chapter 13

Source: EU Commission

The TSD Chapters require all parties to uphold international regulations and guidelines regarding labour rights, environmental protection, and climate. The EU’s TSD Chapters are notable for their comprehensive provisions and high level of ambition, setting them apart from other countries’ TSD approaches.

The analysis conducted in Task 2.2 of the Work Package No.2 was designed to offer an overview of how SDGs are included in the EU trade agreements. With this objective, value chains of three strategic products, cocoa, coffee and olive oil, were analysed respectively in Ghana, Vietnam and Tunisia. An important characteristic of the selected countries is that each of them has different types of trade agreements with the EU, each at different stages of negotiation and development (see table 2).

Table 2: Differences in EU trade agreements with Vietnam, Ghana and Tunisia

	Vietnam	Ghana	Tunisia
Type of agreement	‘New generation’ Free Trade Agreement	Economic Partnership Agreement	Association Agreement (Deep and Comprehensive Free Trade Agreement under negotiation)
Entry into force	1 st August 2020	Provisionally applied since 1 st December 2016	1 st March 1998, ongoing negotiations on modernisation since 2015
Was a SIA conducted?	Yes	Not specifically for Ghana (one for ECOWAS region)	Yes
Is a TSD Chapter included in the agreement?	Yes	No	Proposal under negotiation
Value chains analysed	Coffee	Cocoa	Olive oil
Existing trade barriers	No, it was duty and quota free before the agreement	No, duty free and quota free access on EU markets due to the agreement	Yes, preferential access with tariff rate quotas: annual duty-free quota for the first 56,700 tons of virgin other than lampante olive oil, then a tariff of €1.245/kg

Source: Own elaboration

This heterogeneity is reflected in the structure of the reports produced for the case studies. Due to variations in characteristics at the country, agreement, stage of implementation, and product level, paragraphs in the reports may differ to effectively address the specific needs of each country (see table A1 - Appendix).

This synthesis report aims to present a short resume of the case studies with a specific focus on summarizing the key differences, primary outcomes, lessons learned and policy recommendations. The differences concern two levels: the structural composition of the case studies and the derived lessons learned and policy recommendations. The overarching objective of this work is to formulate evidence-based policy recommendations that can prove valuable to the EU in its ongoing and forthcoming negotiations.

2. The Sustainability Impact assessment

The Sustainability Impact Assessment (SIA) is a crucial tool for ensuring all sustainability-related matters are thoroughly considered. The European Commission's Handbook for Trade Sustainability Impact Assessment requires that the EU evaluate the potential economic, social, and environmental effects of all FTAs that are being negotiated. This evaluation should be carried out through a SIA that includes a model-based quantitative analysis and consultation process. In this context, it is crucial to consult stakeholders to identify potential negative impacts of trade liberalisation and determine measures to address these issues. Therefore, civil society and interest groups to effectively participate in designing TSD Chapters are involved from the negotiation stage. This participation provides an opportunity to raise significant sustainability concerns and recommend appropriate measures.

Although the SIAs should form the basis of TSD Chapters, they have been criticized for their limited influence on the decision-making process and their incomplete attempt to capture environmental and social welfare impacts (Amos and Lydgate, 2020). However, the final SIA reports are usually published two to four years after the negotiation processes are completed. Consequently, this delay reduces the significance of trade SIAs as a tool to guide negotiators, inform the agreement design, and build public support for a trade initiative (Hoekman and Rojas-Romagosa, 2022).

Literature highlights shortcomings in methodology, content, and participation representativeness of the SIAs. There are three main challenges regarding assessing the implications of a prospective FTA. Firstly, negotiations often take place within a limited timeframe, which can make it difficult to conduct a comprehensive assessment. Secondly, the current SIA process does not consider the potential impact of an FTA on third countries. Lastly, there are limitations regarding the extent and depth of treatment of environmental concerns, such as shortcomings in available data, constraints on resources, difficulty in establishing a causal relationship, and scarcity of reliable measurement systems (Plummer et al., 2011; UNCATAD, 2022).

Studies have recommended some practical suggestions to enhance the effectiveness of SIAs. To improve the methodology, it is suggested that independent consultants should conduct SIAs. The methodologies should be clear and tailored to each Free Trade Agreement (FTA) and should evaluate a wide range of social and environmental issues. The assessments should be based on the internal development studies of the countries involved in the FTA. In terms of publicity, it is important to maintain regular contact with stakeholders and consultants, while making reports publicly available and communicating them to third countries that may be impacted by the prospective FTA (Plummer et al., 2011).

As regards as the case studies analysed, the European Commission published in June 2010 the SIAs produced for the FTA between EU and Association of South-East Asian Nations (ASEAN), which included an annex with a specific focus on Vietnam. The assessment, conducted by an independent consultancy company Ecorys, showed that on the economic side, growth could have been expected under the FTA with the EU and it recognised as key issues both the successful implementation of core labour standards and the stimulation of sustainable development for environmentally sensitive areas (European Commission, 2010).

In the case of Tunisia, the SIA, finalised in January 2014, was commissioned by the European Commission's Directorate General for Trade and was carried out by Ecorys. The SIA report underscores the opportunities inherent in the EU-Tunisia DCFTA, not only in terms of fostering economic growth and positive international relations but also in recognizing the challenges related to sustainable development. These challenges are proposed to be addressed through the incorporation of a dedicated TSD Chapter within the agreement. Finally, a SIA was not conducted exclusively for Ghana as the assessment was carried out for the Economic Community of West African States (ECOWAS) in the context of the Economic Partnership Agreements (EPAs) between the EU and the African, Caribbean and Pacific (ACP) countries. The SIA was published in January 2004, and it was conducted by an international Consortium led by PricewaterhouseCoopers (PwC) including Solagral/GRET and l'Institut de Prospective Africaine (IPA) with the support of local experts. The study underscores the importance of the agricultural sector for the all-region, identifying deforestation as a critical environmental concern and recognising cocoa as key commodity.

3. The impact of non-trade provisions: a literature review

Recent studies have been conducted to establish PTAs' role in promoting trade and the impact of specific provisions. PTAs have played a crucial role in reducing trade expenses and expediting economic growth prospects, particularly in lower and middle-income nations

(Fernandes, Rocha, & Ruta, 2021). However, while there is a consensus on PTAs' positive impact on economic integration and expansion of global trade, the effect of Non-Trade Provisions (NTPs) may be heterogeneous. Firstly, the design of these provisions plays a crucial role. Non-trade provisions should avoid excessive complexity while refraining from simple bans, which may be counterproductive. Another important aspect concerns the legal enforceability of these provisions as their impact is strictly related to their success in changing current and expected policies.

Research has found that enforceable NTPs in PTAs boost bilateral trade of environment and labour-intensive goods from high income countries, whereas for developing countries, it was found that they enhance exports of environment intensive goods and decrease labour-intensive ones (Hoekman et al., 2023). Moreover, the effectiveness of binding and non-binding NTPs appears to be issue-specific and one type may be more productive than the other depending on the situation (Francois et al., 2022). Secondly, the effect of non-trade provisions depends on power relations among the actors involved in the agreement. Finally, the impact of non-trade provisions in PTAs is affected by concurrent policies enacted in member countries. There are for example synergies between the inclusion of investment provisions and those related to labour markets, exports, taxes, public procurement, and state-owned enterprises, which contribute significantly to foreign direct investment (FDI) between PTA member countries.

The use of trade policy to uphold non-trade related policy goals demand additional forms of support, encompassing technical and financial measures. Thus, the effects on NTPs can additionally be shaped through complementary instruments aimed at improving non-trade outcomes. There is evidence that countries committed to environmental binding provisions tend to receive higher Official Development Assistance (ODA). Conversely, in the areas of civil, human, and labor rights, countries with non-binding provisions tend to receive more ODA than those with enforceable provisions or no provisions (Francois et al., 2022).

a) ***Environmental provisions***

The empirical literature has identified positive, negative, and neutral effects of trade on the environment, based on three main factors. Economic growth resulting from the increase in trade can be, on the one hand, a driver for natural resources exploitation and increase pollution, as companies may prioritise competitiveness and expansion when gaining access to larger markets. On the other hand, wealth reached by the extension of trade is likely to raise awareness and concerns about environmental issues (Frankel & Rose, 2005). This

shows how economic growth and environmental quality can result in an inverted-U relationship, where trade-environment relationship is initially negative at lower income levels but becomes positive as countries progress to higher income levels. Additionally, the exchange of cleaner and more sustainable technologies facilitated by trade can have a positive impact on the environment when partner countries still rely on more polluting production methods.

Lastly, trade liberalisation can have a negative impact on environment as countries may decide to maximise their comparative advantage in the production of pollution-intensive goods because of abundant resource availability or relocating production from regions with less strict environmental regulations (Acquah & Di Ubaldo, 2022).

Given this close cause-and-effect relationship between trade and the environment, the inclusion of environmental provisions plays a crucial role in the formulation process of trade agreements. In fact, the inclusion of environmental provisions within PTAs, together with the higher environmental standards and regulations, represents a viable approach for mitigating the possible adverse consequences related to pollution havens (Brandi et al., 2020).

In the context of D2.1 of Work package No.2, which focused on the quantitative assessment of Free Trade Agreements contribution to SDGs, Acquah & Di Ubaldo's work investigated the effect of specific environmental provisions in PTAs on environmental targets as defined in the SDGs. More specifically, their study shows how specific environmental provisions in PTAs have statistically significant impacts of provisions on total greenhouse gas emissions, renewable energy use, and the fish stock status (Acquah & Di Ubaldo, 2022). The study also found that the implementation of a cooperative approach, such as the one usually adopted by the EU, is more likely to make progress towards the achievement of SDGs.

b) Labour Provisions

Labour provisions included in all EU FTAs refer to the fundamental International Labour Organization (ILO) Conventions, which outline the core labour standards. These standards encompass the freedom of association, the right to organise and collectively bargain, the elimination of forced labour, the abolition of child labour, and the non-discrimination of workers. Furthermore, the parties involved in the FTAs generally undertaking to promote the ILO's Decent Work Agenda, although other international labour standards are cited in some FTAs (occupational health and safety, protection of the rights of migrant workers, minimum wage and labour inspection). All recent EU FTAs include references to Corporate Social Responsibility (CSR), with provisions encompassing cooperation on CSR issues and their promotion. The EU integrates human rights protection into trade policy, prioritizing

social development within a cooperative framework. The EU sees trade policy not only as an end but to promote sustainable development. In the EU, the approach to labour protection in FTAs is more comprehensive. Achieving sustainable development depends on the coherence and mutual supportiveness among three elements: economy, employment and environment.

There is no evidence in the literature that labour standards provisions have any positive impacts on workers in the EU or its trade partners. Studies examining the effects of the EU-Peru and EU-South Korea agreements have shown that governments have attempted to weaken labour standards protection since these trade agreements with the EU were implemented (Orbie and Vanden Putte, 2016; Harrison, et al., 2018). The study conducted by Harrison et al. (2019) focuses on the impact of labour provisions in FTAs on workers in Guyana, Korea, and Moldova. The authors analysed three case studies and found that these labour provisions have little to no effect in these countries. After conducting semi-structured interviews with stakeholders in the EU and in the three countries, the authors concluded that the existence of TSD Chapters did not lead to any improvements in labour standards governance in any of the case studies. Robertson (2021) argues that labour provisions generally improve working conditions, particularly those provisions related to discrimination, but tend to reduce trade exchanges. The literature seems to emphasize that including non-trade provisions on labour and civil rights in trade agreements is ineffective. Francois et al. (2022) conducted a study that empirically investigated the effect of NTPs on civil and human rights performance indicators. The study found that NTPs have only little effect on these indicators.

4. Key differences and main results in trade agreements with the EU: Ghana, Vietnam, and Tunisia case studies.

The analysis carried out in task 2.2 of Work Package No. 2 aimed to provide an overview of the way in which SDGs are typically treated in EU agreements. Deforestation, biodiversity loss, and poor labour standards in supply chains harm the poorest, especially women in developing countries. The three studies of task 2.2 focused on investigating the functioning of sustainability provisions within trade agreements through case studies conducted in three countries: Vietnam, Ghana and Tunisia. The decision to select stories and countries with significant heterogeneity was made to highlight how nations with diverse characteristics have managed their relations with the EU. The purpose is to determine whether distinctive features, lessons learned, and policy recommendations emerge from diverse contexts.

The EU-Ghana Agreement stands out as a reciprocal Economic Partnership Agreement (EPA), indicating compliance with WTO rules and a commitment to a mutually beneficial partnership extending beyond mere tariff reductions. The EPA approach involves a broader spectrum of economic cooperation and partnership commitments between the EU and Ghana. The agreement is expected to be replaced by the EU-ECOWAS EPA in the future, as the long-term objective of the EU is the creation of a regional single market. In contrast, the FTA between Vietnam and the EU is labelled as a “new generation” agreement, designed to increase mutual benefits through trade exchanges, while enhancing environmental sustainability, human rights, and the rule of law. The EU-Vietnam agreement includes specific TSD Chapter, providing a comprehensive example of the nature and structure of the environmental provisions within this Chapter. Finally, the EU and Tunisia established an Association Agreement (AA), focusing on the liberalization of trade, particularly industrial goods, regulatory framework harmonization, and enhancing financial and economic cooperation. Although the AA dismantled tariffs and quotas on industrial goods, limitations persist as tariff protection and quotas continue in the agricultural sector. Notably, negotiations for a future Deep and Comprehensive Free Trade Area (DCFTA) between Tunisia and the EU are still ongoing.

In all three case studies a qualitative survey was carried out. More specifically, relevant stakeholders for the value chain of cocoa in Ghana, coffee in Vietnam and olive oil in Tunisia, were interviewed. Both in Ghana and Vietnam the aim of the research questions was to assess the impact of the current agreements on sustainable development; whereas on the Tunisian case, since the agreement is still under negotiation, stakeholders were asked to evaluate the expected impact of a future DCFTA on non-product related agricultural issues. In all three cases particular attention was paid to environmental issues, such as deforestation for Ghana and Vietnam and water scarcity for Tunisia.

The key results of the surveys conducted in each country are briefly outlined below:

Vietnam: The results of the survey analysis indicate that the main benefit of the European Union-Vietnam (EVFTA) FTA in the coffee value chain is that it helped improving the quality of the coffee and its added value, as well as stakeholder’s welfare. Conversely, a mayor difficulty derived from the survey concerns market access issues: meeting the high-quality EU standards (that regulate fertilizer and pesticide use, due diligence/corporate social responsibility, and labour) may be an obstacle for small firms. As regards to TSD Chapter, it has had limited impact on sustainability in the coffee production sector in Vietnam. In the near future, Vietnamese exporters, including smallholder coffee farms, will face stricter obligations under the European Commission's approved Deforestation-free Commodities

regulation. This regulation mandates proof that products, such as coffee, exported to EU, did not contribute to global deforestation or forest degradation. From the interviews, it emerges that training, information and support are crucial to helping stakeholders comply with EU requirements. Another important aspect pointed out in the research is the low level of stakeholder involvement in the EVFTA TSD Chapter activities as collaborative mechanisms are not fully exploited. The analysis suggests, therefore, using the cooperation and dialogue mechanisms instituted by the EVFTA TSD Chapter to support the implementation of the EU's sustainability regulation.

Ghana: According to the survey conducted in Ghana, stakeholders consider sustainable development as a crucial aspect of their trade relations with the EU. Most interviewees, including government officials, NGOs, and farmer unions, have rated the importance of sustainability in the cocoa value chain as high. They have recognized the increasing demand for sustainable products in the EU market and emphasized the need for Ghanaian cocoa producers to comply with these standards to grab new market opportunities. During the interview, the participants pointed out that the European Union's focus on sustainable development is in line with the increasing global awareness of the environmental and social impacts of trade and economic activities. The stakeholders in Ghana acknowledged that embracing sustainability in the cocoa value chain is not only essential for accessing EU markets but is also critical for the long-term viability of the sector and the country's overall economic growth. They recognized that sustainable practices not only ensure environmental preservation but also lead to an improvement in the quality of life for farmers, enhanced social welfare, and overall economic growth. Moreover, the results of the survey suggest that the EU-Ghana TSD provisions alone may not be enough to bring about significant improvements in the cocoa value chain. The survey identified several key areas that require attention to promote sustainable practices in the cocoa value chain. Additionally, interview results emphasise the need to utilize existing cooperation mechanisms, such as ex-ante consultation, capacity-building programs, and continual monitoring for achieving the SDGs.

Tunisia: The proposed DCFTA provides an extensive regulatory framework for various sectors, including agriculture, allowing for greater integration of sustainable development issues. As highlighted by the other case studies, it is imperative to engage all parties, including civil society, in the negotiation process. The desk study and stakeholder interviews, focused on the olive oil value chain, has found that: on the one hand, larger producers strongly support the agreement and trade liberalization of the sector; on the other hand, the increase in production that the liberalization would cause could result in significant strain on resources, such as water, and the marginalization of small-scale producers. Regarding environmental issues, stakeholders emphasized the need for refining agronomic strategies to face desertification and water scarcity and raised concerns about the environmental impact of fertilizers and chemical fertilizers. They recognise that the future DCFTA represents a crucial opportunity to support a sustainable transition and the adoption

of techniques for climate change adaptation, encouraging EU investments that would improve production and minimise environmental impact. Results, even in this case study, suggest to use of cooperation mechanisms to provide sustainability enhancements to the olive oil sector.

5. Lessons learned and policy recommendations

The heterogeneous types and stages of agreements with the EU, coupled with diverse engagements in trade negotiations, are reflected in the lessons learned and policy recommendations presented in this section.

Lessons learned

The main lessons learned for the EU have been outlined below and grouped according to 'common aspects' and 'specific aspects'.

Common aspects (Ghana, Tunisia and Vietnam):

- **The design of TSD provisions has suffered from a low involvement of relevant stakeholders, including civil society organizations and other interest groups, from the beginning of the negotiation process, including the SIA exercise.** Giving special consideration to the voice of the most vulnerable groups, including smallholder farmers, is of paramount importance. Embracing inclusive measures, such as conducting ex-ante consultations, to engage all relevant stakeholders in the conceptualization, drafting, and implementation stages, will naturally transition into an ongoing process of monitoring and assessment post-enforcement of TSD provisions. This approach not only promotes a fairer and more egalitarian approach to international trade but also ensures a comprehensive and participatory engagement with stakeholders throughout the entire lifecycle of the agreement.
- **The impact of the international trade agreement on sustainability issues varies depending on the scope of the arrangement and on the maturity of national legislation. The agreement is also affected by the responsiveness of different local actors (e.g., small and large farmers) on stringent areas such as those related to deforestation and the use of chemicals in agriculture.**

Importantly, reaching a robust international agreement can result in subsequent adjustments to internal legislation which may be beneficial at national level (virtuous circle). Recognizing the linkages between TSD provisions, national legislation and responsiveness of different stakeholders is crucial for implementing effective and harmonized sustainability measures.

- **Overall, stakeholders recognize that addressing environmental issues and embracing sustainability aligns with sound and profitable business practices.** Consequently, there is a widespread consensus favouring the implementation of environmental provisions. Notably, environmental private standards and certifications are perceived by the stakeholders, as more effective than the mandatory requirements for accessing the EU market. Conversely, challenges arise in applying labor standards, particularly those related to ILO Conventions, where the implementation of formal contract faces notable difficulties.
- **The three case studies highlighted how sustainable development issues and their related provisions are scattered across various agreements with different natures, structures and stages, making their implementation challenging.** There is a necessity to create a more coherent and unified framework to include all the sustainable development provisions from the different agreements.
- **Insights from the three case studies emphasised the pivotal role of SIAs in elaborating TSD provisions.** SIAs faced some criticisms due to their limited effectiveness and partial coverage of certain aspects of the agreements (social and environmental dimensions). A crucial lesson is the significance of conducting timely SIAs, as final reports, often published years after negotiations, diminish their influence on the negotiation process. Additionally, SIAs tended to focus more on quantitative aspects, neglecting comprehensive evaluations of qualitative factors, including social and cultural dimensions. Moreover, limited stakeholder engagement in SIAs hampered the ability to address the adverse effects of trade liberalization effectively and formulate appropriate measures. Therefore, the methodology of SIAs should be clear, tailored to each agreement, inclusive, and encompass a broad spectrum of social, environmental and economic issues to enhance the effectiveness of SIAs within TSD formulations.

Specific aspects (Ghana and Vietnam):

- **Strengthening capacity-building services targeted at all stakeholders (e.g., producers, processors, traders and retailers) across the value chains is**

essential. This involves not only increasing the exchange of information and training but also fostering a comprehensive understanding of TSD provisions to ensure compliance. A critical aspect of this effort is aiding stakeholders in comprehending mandatory requirements, including those related to Sanitary and Phytosanitary Standards (SPS) and traceability. Equally, important is the ability to differentiate between these mandatory requirements and private and voluntary certifications, such as Corporate Social Responsibility (CSR) and Rainforest Alliance, which often have applicability to specific countries and/or market segments. The improvement of capacity-building services will be beneficial for all participants in the value chain, enabling them to address varying requirements effectively and ensuring compliance with TSD rules.

Policy recommendations

The policy recommendations stem from the analysis of literature and interviews with different stakeholders, such as government institutions, NGOs, farmers' associations and certification agencies, involved in the value chains (cocoa, cashew and coffee) in the three countries. Therefore, they reflect multiple points of view.

The primary policy recommendations for the EU are detailed below and organized as a “common aspects” and “specific aspects”.

Common aspects (Ghana, Tunisia and Vietnam):

- **To effectively leverage the potential of TSD provisions, it is crucial for the EU to address some key challenges such as limited awareness and capacities among stakeholders, limited compliance with unilateral standards and poor dialogue with the institutional and non-institutional partners.** Strategic measures such as workshops, targeted training programs, exchanges of best practices, monitoring and adaptation initiatives emerge as pivotal tools for promoting sustainability and fostering collaboration among EU institutions and relevant stakeholders involved in the value chains. This collaboration paves the way for a comprehensive, sustainable, and mutually beneficial international trade exchange.
- **The EU should incorporate the aspect of sustainable development into all agreements by creating a specific section that references all TSD provisions.** To address this, it is suggested to systematically include a dedicated TSD Chapter in each new agreement, even if only by referencing, reiterating, or replicating the content found in other previous agreements already ratified. Moreover, compliance with these provisions should become legally binding, with prompt action taken in cases of non-compliance.

Specific aspects (Ghana and Vietnam):

- **The EU should actively promote incentive scheme system in collaboration with partner countries, encompassing a diverse set of mechanisms aimed at delivering tangible benefits to all stakeholders involved in the value-chain.** This initiative necessitates the establishment of a comprehensive policy framework, involving different institutions at the national level. Within this framework, the partner countries should provide incentives based on strict compliance with specific requirements (e.g., compliance with the European Regulation on deforestation-free products). The incentive mechanisms consist of various components that should be implemented at the national level, including support for farmers to access quality schemes, targeted agri-environmental payments, and improved traceability systems along the value-chains. The EU should commit to providing technical assistance to the partner countries, contributing to improve the sustainability of supply chains within the agricultural sectors.
- **EU should advocate to raise legal requirements and due diligence norms on sustainability issues in partner countries.** Direct regulation of an industry or activity by legislation that states what is allowed and what is not should be introduced to deal with complex problems such as deforestation, human and labour rights. Nonetheless, when governments are reluctant to explicitly fix legal requirements, key market players should find an agreement on a set of environmental and social criteria which companies must comply with (e.g., Roundtable on Sustainable Palm Oil).

Specific aspect (Ghana):

- **To address persistent challenges hindering the smooth adoption of sustainable practices in the cocoa value chain, the EU should prioritize targeted technical support to small cocoa farmers.** This technical assistance should be designed to help farmers to overcome obstacles, including limited awareness, capacity constraints, and other main challenges related to compliance with the stringent (unilateral) food safety, environmental, and labor standards imposed by the EU market. By providing technical assistance, small cocoa farmers can be empowered to meet elevated EU sustainability standards, ensuring the economic viability by enhancing both market access and potential price premium for cocoa produced sustainably.

Specific aspect (Vietnam):

- **To enhance the enforceability of the TSD provisions, it is essential to prioritize the definition of specific supply chains to which these rules should be**

applied. Drawing from the recent Regulation on deforestation-free products, which focuses on commodities such as soy, beef, palm oil, wood, cocoa, coffee, rubber, and their derivatives, a more precise and clear identification of relevant supply chains is of paramount importance. This clarity is especially crucial in addressing environmental concerns such as deforestation, biodiversity loss and CO2 emissions. This strategic approach can significantly contribute to the effective implementation and monitoring of TSD provisions, enabling prompt action when necessary.

Specific aspect (Tunisia):

- **The EU's focus should continue to center on providing development aid and cooperation programs, addressing areas such as labor rights, social protection, and the adoption of sustainable agricultural practices.** The ongoing negotiations should prioritize the establishment of stable economic growth and the preservation of social and territorial cohesion, including support for its rural regions.
- **The existing tariff quota system poses constraints on the growth and potential of the olive oil sector, restricting production exports and hindering the realization of value-added benefits.** The existing system restricts Tunisia's ability to export olive oil to the EU market, keeping local producers confined to the role of commodity producers with low added value. To address this challenge and pave the way for future Deep and Comprehensive Free Trade Agreement (DCFTA) strategies, it is recommended that the EU consider either the elimination or substantial expansion of tariff quotas for olive oil imports.
- **It is essential that the EU prioritize comprehensive training programs and technical assistance aimed at increasing human capital asset.** Special attention should also be paid to more vulnerable groups of workers, with a particular focus on empowering women in the workforce. While fostering the growth of human capital, the EU should also shape provisions within a future DCFTA to mitigate potential negative effects and enhance the value added in Tunisia's olive oil sector.
- **To contribute to the sustainable management of water resources in Tunisia, the EU is encouraged to provide technical support for the successful implementation of Tunisia's National Water Strategy.** The EU's support should focus on assisting the Tunisian government, particularly in promoting the adoption of sustainable cultivation methods, advocating for water-efficient practices, and implementing initiatives for wastewater recycling. It is crucial for the EU to engage in collaborative efforts, including conducting context-specific research studies in partnership with local institutions. By prioritizing these measures, the EU can play a pivotal role in advancing water sustainability in Tunisia, contributing to both agricultural productivity and environmental sustainability in the country.

References

- Adriansen J., & González-Garibay, M. (2013). The illusion of choice: the European Union and the trade-labor linkage. *Journal of Contemporary European Research* 9, 542–549.
- Amos, R. & Lydgate E. (2020). *Assessing Sustainability Impacts of Trade Agreements*, Sussex Sustainability Research Programme (SSRP), University of Sussex and Institute of Development Studies, 2020, p. 3; and references.
- Bastiaens, I., & Postnikov, E. (2019). Social standards in trade agreements and free trade preferences: an empirical investigation. *The Review of International Organizations*, 923–940. <https://doi.org/10.1007/s11558-019-09356-y>.
- Borowicz, A. & Daugėlienė, R. (2023). Global Public Goods and Sustainable Development in the Practice of International Organizations. Chapter 8, 172–191, https://doi.org/10.1163/9789004687264_010
- Brandi, Schwab, C., Berger, J., Morin, A. & Jean-Frédéric. (2020). Do Environmental Provisions in Trade Agreements Make Exports from Developing Countries Greener? *World Development*, DOI:10.1016/j.worlddev.2020.104899.
- European Commission (2004). Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements. Regional SIA: West African ACP countries. <https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/f6376837-2365-43b0-9a09-e545c90c5f6d/details?download=true>
- European Commission (2006). Global Europe: competing in the World. COM (2006) 567 final, 4 October.
- European Commission (2010). Commissions Services' Annex On Vietnam To The Position Paper On The Trade Sustainability Impact Assessment Of The Free Trade Agreement Between The EU And ASEAN <https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/cdcb29bc-81ac-444e-8aeb-0db481e0bcfc/details?download=true>
- European Commission (2012). Trade, growth and development: tailoring trade and investment policy. COM (2015)497/, 14 October.
- European Commission (2014). Trade for All: Towards a More Responsible Trade and Investment Policy.
- European Commission (2014). European Commission Services' Position Paper On The Trade Sustainability Impact Assessment In Support Of Negotiations Of A Deep And Comprehensive Free Trade Agreement Between The European Union And Tunisia.

<https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/4705c7b6-90c3-4ba4-89b6-4db4ae4c9653/details?download=true>

European Commission (2015). Trade for all. Towards a more responsible trade and investment policy. COM(2015)497/4, 14 October.

European Commission, Communication from the European Commission on the Inclusion of Respect for Democratic Principles and Human Rights in Agreements between the Community and Third Countries, Document No. 5/23/1995, COM(95)216, 8.

European Commission, DG Trade, Handbook for Trade Sustainability Impact Assessment, 2nd edition, 2016, p. 9.

Fernandes, A. M., Rocha, N., & Ruta, M. (2023, June 20). Vox EU. retrieved from: CEPR: <https://cepr.org/voxeu/columns/how-deep-trade-agreements-shape-non-trade-outcomes-new-ebook>

Fernandes, A., Rocha, N., & Ruta, M. (2021). The Economics of Deep Trade Agreements. World Bank eBook. CEPR Press.

Francois, J., Hoekman, B., Manchin, M., & Santi, F. (2022), ‘Pursuing environmental and social objectives through trade agreements’, EUI RSC Working Paper 2022/73, European University Institute.

Frankel, J., & Rose, A. (2005). Is trade good or bad for the environment? Sorting out the causality. *Review of Economics and Statistics* 131(3), 1113-1180.

Harrison James, Barbu Mirela, Campling Liam, Richardson Ben, Smith Adrian, Governing Labour Standards, through Free Trade Agreements: Limits of the European Union’s Trade and Sustainable Development Chapters, *Journal of Common Market Studies*, Vol. 57(2), 2019, p. 132.

Hoekman Bernard, Rojas-Romagosa Hugo, EU Trade Sustainability Impact Assessment - Revisiting the Consultation process, *Journal of International Economic Law*, Vol. 25, 2022, pp. 45-60.

Harrison, J., Barbu, M., Campling, L., Richardson, B., & Smith, A. (2018). ‘Governing Labour Standards through Free Trade Agreements: Limits of the European Union’s Trade and Sustainable Development Chapters’, *Journal of Common Market Studies*, <https://doi.org/10.1111/jcms.12715>

Orbie, J., & Vanden Putte, L., (2016). “Labour Rights in Peru and the EU Trade Agreement: Compliance with the Commitments under the Sustainable Development Chapter”, OFSE Working Paper (2016).

Pham, NT., (2017) Labour Provisions in the US and EU FTAs: A Two-Level Games Perspective. GEG Working Paper, August 2017.

Plummer, Michael G., Cheong, D., & Shintaro, H., (2011). Methodology for impact assessment of free trade agreements. Asian Development Bank, 2011.

Poletti, A., & Sicurelli, D., (2016). The European Union, preferential trade agreements, and the international regulation of sustainable biofuels. *Journal of Common Market Studies* 54, 249–66.

Poletti, A., & Sicurelli, D., (2018). *The Political Economy of Normative Trade Power Europe*. Basingstoke: Palgrave Macmillan.

Poletti, A., Sicurelli, D., & Yildirim, A., (2021). Promoting sustainable development through trade? EU trade agreements and global value chains. *Italian Political Science Review / Rivista Italiana Di Scienza Politica*, 51(3), 339-354. doi:10.1017/ipo.2020.33.

Rocha, N., & Fernandez, A. (2023). Social and environmental provisions in trade agreements soar. Available at <https://blogs.worldbank.org/trade/social-and-environmental-provisions-trade-agreements-soar>

TREND Analytics, (2017, June 28). The Rise of Environmental Provisions in Trade Agreements. Tratto da TRade & ENvironemnt Databade - TREND Analytics. Environemnt in Preferential Trade Agreements: <https://klimalog.idos-research.de/trend/stories/environmental-provisions-in-preferential-trade-agreements/>.

UNCTAD United Nations (2022). *Guidebook on Trade Impact Assessment*. UNCTAD/DITC/TNCD/2021/4 eISBN: 978-92-1-001254-6. Available at <http://creativecommons.org/licenses/by/3.0/igo/>.

Appendix

Table A1: Structure of the three reports

Sustainability of cocoa value chain: an analysis of the EU-Ghana Economic Partnership Agreement	Effect of EU bilateral trade agreement on the sustainability of the Tunisian olive oil value chain	Supporting agri-food sustainability: a case study of the EU-Vietnam Free Trade Agreement
1. Introduction	1. Introduction	1. Introduction
1.1 Scope of the study	2. Desk analysis	2. Desk analysis
1.2 Research design	2.1 Olive oil bilateral trade	2.1 EU Trade and Sustainable Development (TSD) Chapters: the need for reform
1.3 Methodology	2.2 Export channels	2.2 Challenges in implementing TSD provisions
2. Desk analysis	2.3 Deep and Comprehensive Free Trade Agreement (DCFTA) still in discussion	2.3 The link between standards and TSD Chapters
2.1 Chronology of the EU-ECOWAS Economic Partnership Agreement (EPA)	3. Sustainability Impact Assessment (SIA)	2.4 Vietnam coffee value chain and sustainable development
2.2 Trade and Sustainable Development Chapter (TSD)	3.1 The SIA methodology	3. Methodology

in EU and other country agreements		
2.3 Sustainability Impact Assessment (SIA)	3.2 Impacts on macroeconomy level	3.1 Research design
2.4 EU-ECOWAS EPA and sustainable development	3.3 Impacts on social and human rights	3.2 Data collection
2.5 Another sustainability mechanism: the EU-Ghana Alliance on Sustainable Cocoa	3.4 Impacts on environment	3.3 Data analysis
2.6 Ghana’s Cocoa value chain and sustainable development	4. EU-Tunisia DCFTA: an analysis of sustainable development	4. Results
3. Qualitative study findings	5. Tunisia olive oil value chain and sustainable development	4.1 Advantages and disadvantages of the FTA, and effects on coffee sustainability
3.1 Sustainable development as a key focus	5.1. Structure of olive oil value chain	4.2 The most significant sustainability challenges in the coffee value chain
3.2 Challenges in implementing TSD provisions	5.2 Olive tree cultivation systems	4.3 Degree of involvement in the EVFTA TSD Chapter activities, and influence on implementation of Multilateral Environmental Agreements

3.3 Complementary role of autonomous instruments	5.3 Water issues in Tunisia	4.4. Which types of regulations most shape sustainability in the coffee value chain?
3.4 Leveraging TSD mechanisms for unilateral legislation	5.4 Main strategies to overcome water scarcity in the Tunisian olive oil sector	4.5 Sustainability standards as a good business strategy
3.5 Opportunities for strengthening cooperation	6. Stakeholders discourse about DCFTA	5. Qualitative study findings
4. Conclusion	6.1 Research design	5.1 The conflation of sustainability standards
Appendix	6.2 Methodology	5.2 The need for capacity building
A. Interview questions	6.3 Qualitative study findings	5.3 Using the TSD Chapter more effectively: the example of the Deforestation Free Commodities Regulation
	7. Conclusions	
B. Other trade agreement provisions and SDG linkages: lessons learned	References	6. Conclusion
B.1 Labour provisions	Appendix	Appendix
B.2 Environmental provisions	A. Interview questions	A. Interview questions
	B. Other trade agreement provisions and SDG linkages: lessons learned	
	B.1 Labour provisions	

	B.2 Environmental provisions	
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TRADE4SD

Fostering the positive linkages between trade and sustainable development

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Supporting agri-food sustainability: a case study of the EU-Vietnam Free Trade Agreement

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Supporting agri-food sustainability: a case study of the EU-Vietnam Free Trade Agreement¹

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Abstract:

The European Commission has called for its EU FTA Trade and Sustainable Development (TSD) chapters to support higher standards. Rather than focusing on standards themselves, environmental commitments in TSD chapters are implemented through dialogue between stakeholders to address identified environmental concerns. In this article, using a qualitative case study approach, we examine how these commitments to dialogue interrelate with specific sustainability standards in the agri-food area. Identifying a sector of economic and environmental relevance in the EU-Vietnam Free Trade Agreement, the coffee value chain, we undertook expert interviews with key stakeholders in the EU and Vietnam. A central outcome of these interviews was that actors in the coffee value chain expressed concerns about ability to meet sustainability standards, while Environment chapter mechanisms promoting dialogue were largely invisible. Environmental issues increasingly constitute market access barriers for exporters to the EU, suggesting the need to re-envision TSD cooperative fora as mechanisms to support capacity-building to address these environmental market access concerns.

Keywords: Free Trade Agreement Sustainable Development Goals, Trade and Sustainable Development, Environmental provision, Coffee Value Chain

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Appendix55

A. Interview questions..... 55

1. Introduction

As part of its reform proposals, the European Commission has called for its FTA Trade and Sustainable Development (TSD) chapters to achieve ‘real and lasting change on the ground, through the effective application of enhanced social and environmental standards.’² The EVFTA entered into force on August 1st 2020 and constitutes one of the EU’s “new generation” FTAs. Academic analyses of the impacts of TSD chapters on environmental regulation and standards have varied greatly. As outlined below, analyses using economic methods tend to result in findings of stronger correlation between TSD chapters and improved environmental standards, while those using legal or other qualitative approaches tend to conclude that they are less effective. The European Commission is currently undertaking a reform process to improve their effectiveness. This suggests the need for further understanding of causal links between provisions included in TSD chapters and their results.

As environmental provisions in the TSD chapters consist largely of high-level commitments to engage in thematic cooperation on environmental issues, the linkage with higher standards that the Commission suggests in the quote above is not wholly self-evident. In FTAs, product standards have traditionally been treated separately from national environmental regulation on issues such as deforestation or climate change: while the former are addressed in market access chapters, most relevantly on Sanitary and Phytosanitary Standards, Trade and Sustainable Development chapters have traditionally focused on the latter. Yet with respect to unilateral EU regulation, this distinction is no longer salient: EU market access requirements are increasingly interdependent with requirements to regulate countries’ domestic environment to particular specifications.

In this article we examine the case study of the coffee sector in Vietnam, with a particular emphasis on so-called ‘non-product related’ environmental sustainability issues, such as deforestation and land degradation. Coffee is a significant agricultural export from Vietnam to the EU, and the EVFTA identifies sustainable forest management as an area for environmental cooperation in the EVFTA (Art. 13.8). The EU has responded unilaterally to concerns about coffee’s role in driving deforestation through introducing unilateral due diligence requirements for coffee exporters to establish that production has not contributed to deforestation.³

² EU Commission’s services, Non-paper, Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development chapters in EU FTAs, 2018, p. 1.

³https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en

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International sustainability standards, in particular the 4C certification scheme,⁴ also play a key role in shaping sustainability standards in the coffee value chain.

We identified stakeholders with expertise in the EVFTA and coffee value chains in Vietnam, and undertook qualitative interviews to better understand how they viewed, and interacted with, TSD chapter provisions and other drivers of sustainability in agri-food production, including EU regulation and voluntary standards.

We conclude that the EVFTA provides an opportunity to use the many cooperation and dialogue mechanisms it has established more effectively. While the European Commission’s reform proposal on TSD chapters does reflect the need to support capacity building to some extent, we argue that this commitment could be strengthened, and that TSD chapters could be employed to help guide both *ex-ante* and *ex-post* EU environmental policy formation which affects market access in trade partners.

2. Desk analysis

2.1 EU Trade and Sustainable Development (TSD) chapters: the need for reform

Following the adoption of the Treaty of Lisbon,⁵ the EU embeds sustainability provisions within its bilateral trade agreements. In 2018, the European Economic and Social Committee stated that “TSD chapters play a crucial role in achieving (...) values similar to those that we recognise as “EU values”, including social, consumer and environmental standards and cultural diversity, and to make the public face of the EU visible in those countries, as well as providing an important platform to monitor commitments to human, labour and environmental rights in trade agreements”⁶.

These “new generation” free trade agreements (FTAs) all include a specific Trade and Sustainable Development (TSD) chapter based on three pillars: commitments to international agreements on labour and the environment, structures to involve civil society organisations,

⁴ <https://www.4c-services.org/>

⁵ (art. 11 and art. 205 TFEU)

⁶ European Economic and Social Committee, Opinion on Trade and sustainable development chapters (TSD) in EU Free Trade Agreements (FTA), 2018, §1.5.

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and a dedicated dispute settlement mechanism.⁷ The EU- Vietnam FTA (EVFTA) is broadly illustrative of the type and structure of commitments included in such chapters. It affirms both Parties' commitment to pursue sustainable development and cooperate on environment and labour issues (Article 13.1). It requires that Parties do not fail to enforce their environment and labour laws in a way that affects trade and investment, a requirement often described as a non-regression or non-derogation clause.⁸ It also sets out commitments to implement multilateral labour and environmental agreements and identifies a series of environmental issues on which Parties will cooperate. These topics include climate change, deforestation and biological diversity; Parties commit to respecting Multilateral Environmental Agreements in these areas and to cooperating with one another.

Implementation takes place by establishing Committees of stakeholders and Government officials: a Domestic Advisory Group, Committee on Trade and Sustainable Development and Civil Society Forum. There is also a dispute settlement mechanism. These mechanisms have a broad mandate: implementing all issues relating to trade and sustainability.

2.2 Challenges in implementing TSD provisions

A body of academic and policy analysis has emerged that examines the effectiveness of EU TSD chapters. Academic literature has engaged in economic analysis of the relationship between commitments in TSD chapters, sectoral trade flows and domestic regulation. Some analyses conclude that the inclusion of environmental provisions in FTAs do have positive environmental impacts in practice: Brandi, Schwab, Berger and Morin show that environmental provisions can help increase trade in green exports and decrease dirty exports from developing countries⁹. Another study suggests a positive relationship between domestic environmental legislation and preferential trade agreements with environmental provisions. It underlines that

⁷ European Commission, Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development chapters in EU FTAs, February 2018.

⁸ *A Party shall not waive or derogate from, or offer to waive or derogate from, its environmental or labour laws, in a manner affecting trade and investment between the Parties.* EU-VietNam Free Trade Agreement (signed 20 June 2019), Article 13.7.

⁹ Brandi Clara, Schwab Jakob, Berger Axel, Morin Jean-Frédéric, Do environmental provisions in trade agreements make exports from developing countries greener? World Development, Vol. 129, 2020.

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the relationship is stronger in developing countries, more pronounced before the entry into force of the Agreement, and that it greatly varies between different issues.¹⁰

Another strain of literature has been more critical of the effects of TSD chapters, focusing in particular on the lack of enforceability of their core commitments. EU TSD chapters are characterised by a cooperative approach of convening stakeholders to engage in dialogue on issues identified in the chapter. The violation of the core non-regression requirement is not subject to sanctions or to the general dispute settlement mechanism, such that non-compliance is not linked to economic consequences. The EU's failure to impose sanctions is often compared unfavourably to the use of sanctions by the US. While some argue that the EU and US approaches are complementary,¹¹ others consider that sanctions constitute an important leverage tool for the EU¹².

A 2022 public consultation commissioned by the European Commission showed that most stakeholders were unsatisfied with the implementation and enforcement of TSD chapters.¹³ Stakeholder consultation revealed that most NGOs and trade unions, a minority of business associations and half of public authorities who responded to the survey supported trade sanctions.¹⁴ TSD provisions are often characterized as 'soft' or 'promotional'.¹⁵ Others are less critical of the lack of sanctions. Mortensen concludes that "in practice and on paper, there is no clear divide between a "hard" American model and a "soft", dialogue-based European

¹⁰ Brandi Clara, Blümer Dominique, Morin Jean-Frédéric, When Do International Treaties Matter For Domestic Environmental Legislation? *Global Environmental Politics*, Vol. 19(4), 2019.

¹¹ Bastiaens Ida, Postnikov Evgeny, Greening Up: The effects of Environmental Standards in EU and US Trade Agreements, N/A.

¹² Lowe Sam, The EU should reconsider its approach to trade and sustainable development, Center for European Reform, Insight, 2019.

¹³ The London School of Economics and Political Science, Open Public Consultation on the Trade and Sustainable Development (TSD) Review, 2021. Available at: <https://circabc.europa.eu/rest/download/95aafa87-8d69-4f1e-9ce6-a4e5416ba444?ticket=>

¹⁴ The London School of Economics and Political Science, Open Public Consultation on the Trade and Sustainable Development (TSD) Review, 2021. Available at: <https://circabc.europa.eu/rest/download/95aafa87-8d69-4f1e-9ce6-a4e5416ba444?ticket=>

¹⁵ Campling et al. oppose the European "promotional" approach to the American approach, that they qualify as "conditional" because "labour provisions make the conclusion of a particular FTA conditional on respect for particular labour standards or allow sanctions in the FTA if standards are violated" (Campling Liam, Harrison James, Richardson Ben, Smith Adrian, Can labour provisions work beyond the border? Evaluating the effects of EU Free Trade Agreements, International Labour Organisation, 2016, p. 361). See Velut et al. for an extensive overview of institutional mechanisms and civil society participation in implementing and monitoring TSD provisions in EU FTAs (Velut Jean-Baptiste et al., Comparative Analysis of Trade and Sustainable Development Provisions in Free Trade Agreements, London School of Economics, 2022).

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model”¹⁶. This is because both use threats and incentives to influence their trading partners, and sanctions are rarely used in practice by the US.

Some academics characterize the failure of TSD chapters as a result of the fact that the collaborative mechanisms are not fully exploited.¹⁷ The TSD dispute settlement mechanism has only been used once in the context of an FTA, in relation to the respect of labour standards in the automotive industry in Korea¹⁸. To date, no environmental issue has ever been referred to a Panel of Experts under an EU TSD chapter.

Others argue that the main cooperative fora created by TSD chapters, Domestic Advisory Groups (DAG) and Civil Society Fora, amount to the EU exporting a participatory system that cannot function in other socio-political contexts, thus creating an illusion of participation¹⁹. Ashraf & van Seters observe that a reform of civil society engagement in EU FTAs is necessary, and they provide recommendations to enhance the effectiveness of participation mechanisms.²⁰

The European Economic and Social Committee, which is the DAG coordinating body within the EU, concluded that “The EESC believes action is required from the Commission to improve the effectiveness of TSD chapters to ensure that social, environmental, consumer and labour rights are upheld. A key part is linked with improving the effectiveness of DAGs as the bodies tasked with monitoring these commitments.”²¹

¹⁶ Mortensen Jens, Towards more effective sustainability provisions in future European trade agreements: can Europe learn from the US? University of Copenhagen, Discussion Paper, 2017.

¹⁷ Kettunen Marianne, Bodin Eloïse, Davey Ellie, Gionfra Susanna, Charveriat Céline, An EU Green Deal for trade policy and the environment: Aligning trade with climate and sustainable development objectives, Institute for European Environmental Policy, 2020; Smith Adrian, Harrison James, Campling Liam, Richardson Ben, Barbu Mirela, Free Trade Agreements and Global Labour Governance: The European Union's Trade-Labour Linkage in a Value Chain World (Routledge), 2020, p. 44, with further references.

¹⁸ The Report of the Panel of Experts is available at: https://trade.ec.europa.eu/doclib/docs/2021/january/tradoc_159358.pdf

¹⁹ Smith, Harrison et al. refer to this phenomenon as the “Brussels Effect”; Smith Adrian, Harrison James, Campling Liam, Richardson Ben, Barbu Mirela, Free Trade Agreements and Global Labour Governance: The European Union's Trade-Labour Linkage in a Value Chain World (Routledge), 2020, pp. 134-136; Ha Thu Mai, Schweisselhelm Erwin, Labour Rights and Civil Society Empowerment in the EU-Vietnam Free Trade Agreement, Berlin School of Economics and Law, Working Paper N°115, 2020; Martens Deborah, Potjomkina Diana, and Orbie Jan, Domestic Advisory Groups in EU Trade Agreements: Stuck at the Bottom or Moving up the Ladder?, Friedrich Ebert Stiftung, 2020.

²⁰ Ashraf Nadia, van Seters Jeske, Making it count: civil society engagement in EU trade agreements, ECDPM, Discussion Paper No 276, 2020, p. 15.

²¹ European Economic and Social Committee, Opinion on Trade and sustainable development chapters (TSD) in EU Free Trade Agreements (FTA), 2018

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In a 2018 non-paper, the European Commission’s services recognised that the implementation of the TSD Chapters should be improved.”²² It set out the objective that TSD chapters achieve ‘real and lasting change on the ground, through the effective application of enhanced social and environmental standards.’²³ This non-paper presented 15 “concrete and practicable” actions to reinforce collaboration with partner-countries, and enable civil society to play their role in the implementation process. A project to support civil society participation was launched.

The European Commission further developed its position in its 2022 Communication “The power of trade partnership: together for green and just economic growth”²⁴. Among other measures, the Commission suggested extending the general state to state dispute settlement mechanism to the TSD chapter and committed to including an option of applying trade sanctions if Parties fail to comply with core provisions of the ILO or implement the Paris Agreement. The EU’s approach will remain based on cooperation and dialogue, and sanctions will only be complementary, applied in limited circumstances.

The new action-plan is based on six priority areas, including enhancing a country specific approach, increasing the monitoring of the implementation of TSD commitments and reinforcing the role of civil society. EU reform proposals show that the need for stronger enforcement and more financial and political commitment to civil society participation has been recognized. It remains uncertain whether proposed reforms will translate into the raising of standards that the Commission sets out as its ultimate objective.

2.3 The link between standards and TSD chapters

While some analyses outlined above focused on the structure and enforceability of TSD chapters, largely using legal methodologies, economic analyses examined the correlation between particular provisions and environmental outcomes. The discrepancy between their conclusions, with economic methods resulting in a more positive assessment of the results of TSD chapters, suggests the need to identify causal links between such provisions and their results.

²² EU Commission’s services, Non-paper, Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development chapters in EU FTAs, 2018, p. 3.

²³ EU Commission’s services, Non-paper, Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development chapters in EU FTAs, 2018, p. 1.

²⁴ EU Commission, Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2022) 409 final, 2022.

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A review of amendments that were made to Vietnamese environmental laws reveal that very few provisions were modified, before or after the ratification of the EVFTA²⁵. This element contradicts literature suggesting that, as a result of the emphasis of TSD chapters on policy dialogue, EU's trading partners tend to modify their internal environmental legislation after the entry into force of a particular FTA²⁶.

How TSD provisions function in practice once negotiated has received relatively little attention in academic literature. As argued by Harrison et al, 'scrutiny of the *effect* of the EU's approach and related policy implications has not been at the centre of academic debates in this field.'²⁷

Based on the idea that similar FTA provisions might have different consequences depending on where they apply (country and sector of the economy), Harrison et al examined how labour provisions in FTAs affect the lived experience of workers through case-studies of particular value chains.²⁸ Through semi-structured interviews with stakeholders, the authors argue that there is 'no evidence that the existence of TSD chapters has led to improvements in labour standards governance in any of the case studies.'²⁹

2.4 Vietnam coffee value chain and sustainable development

Extending the sectoral approach of Harrison et al. to environmental sustainability, we focused on the coffee sector in Vietnam. The EVFTA entered into force on August 1st 2020 and constitutes one of the EU's "new generation" FTAs, with a TSD chapter whose core elements are outlined above. The EVFTA includes a specific provision on sustainable forest management and trade in forest products (art. 13.8). The EVFTA does not provide for the elimination of tariffs on coffee being exported to the EU; coffee exports from Vietnam already

²⁵ National Assembly's resolution Annex.

²⁶ Bastiaens Ida, Postnikov Evgeny, Greening Up: The effects of Environmental Standards in EU and US Trade Agreements, N/A

²⁷ Harrison James, Barbu Mirela, Campling Liam, Ebert, Franz Christian, Labour Standards in EU Free Trade Agreements: Reflections on the European Commission's Reform Agenda, World Trade Review, Vol. 18(4), 2019, p. 637.

²⁸ Smith Adrian, Harrison James, Campling Liam, Richardson Ben, Barbu Mirela, Free Trade Agreements and Global Labour Governance: The European Union's Trade-Labour Linkage in a Value Chain World (Routledge), 2020, p. 373.

²⁹ Harrison James, Barbu Mirela, Campling Liam, Richardson Ben, Smith Adrian, Governing Labour Standards, through Free Trade Agreements: Limits of the European Union's Trade and Sustainable Development Chapters, Journal of Common Market Studies, Vol. 57(2), 2019, p. 132.

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enter the EU tariff free. In this sense, there is not a clearly identifiable financial benefit for Vietnamese exports taking place at the point of ratification of the FTA.

Coffee accounts for 42.2% of Vietnam's total major agri-product export to the EU, the largest market share of any single agricultural product.³⁰ The total export value of Vietnam's main agri-products (including coffee, cashew nuts, rubber, vegetables, pepper, rice and tea) to the EU market has significantly increased over time. In 2021, the EU accounted for 13.7% of Vietnam's agri-product export, becoming one of the largest export markets. The EU27 is the biggest market for Vietnam's coffee with key importers of Germany, Italy, Spain, and Belgium. In 2020, the EU27 market accounted for 48% of Vietnam's coffee export value, and the share has increased over time. Vietnam is also the second-largest coffee supplier to the EU27 market in 2021, after Brazil and excluding the EU countries such as Switzerland, Germany, Italy, and France (internal trade).³¹

There are various coffee value chains in Vietnam, which are different in attributes, governance, actors, structures, and standards depending on their political, economic, social, and natural conditions.³² Robusta coffee accounts for more than 95 per cent of total output, and Arabica makes up most of the remaining 5 percent.³³ It is widely agreed that Buon Ma Thuot city of Dak Lak province is the “Coffee Capital” of Vietnam for the coffee quality, coffee growing area, and coffee productivity and production.³⁴ Dak Lak province has implemented a new large-scale production master plan with farmers' participation in specializing in industrial

³⁰ Ministry of Industry and Trade (MOIT, 2022). Xuất khẩu nông sản sang EU nắm bắt cơ hội từ EVFTA. Accessed: 07 October 2022. Available online: <https://moit.gov.vn/tin-tuc/thi-truong-nuoc-ngoai/xuat-khau-nong-san-sang-cu-nam-bat-co-hoi-tu-cvfta.html>

³¹ ITC, above n. 30.

³² Hoang, V. (2021). Modern short food supply chain, good agricultural practices, and sustainability: a conceptual framework and case study in Vietnam. *Agronomy*, 11(12), 2408; Hoang, V., & Nguyen, A. (2019). PGI Buon Ma Thuot Coffee in Vietnam. In *Sustainability of European Food Quality Schemes* (pp. 265-285). Springer, Cham.

³³ Standen, T., & Falak, A. (2022). Vietnam's Coffee Market Faces Challenges Despite Strong Exports, Domestic Growth. *Vietnam Briefing*. Accessed: 08 October 2022. Available online: <https://www.vietnam-briefing.com/news/vietnams-coffee-market-faces-challenges-despite-strong-exports-domestic-growth.html/>

³⁴ Hoang, V. (2019). the dynamics of agricultural intra-industry trade: a comprehensive case study in Vietnam. *Structural Change and Economic Dynamics*, 49, 74-82; Nguyen, G. N., & Sarker, T. (2018). Sustainable coffee supply chain management: a case study in Buon Me Thuot City, Daklak, Vietnam. *International Journal of Corporate Social Responsibility*, 3(1), 1-17.

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coffee growing. With the history of over 70 years, coffee has become the essential sector in Dak Lak province with significant contribution to its social and economic condition.³⁵

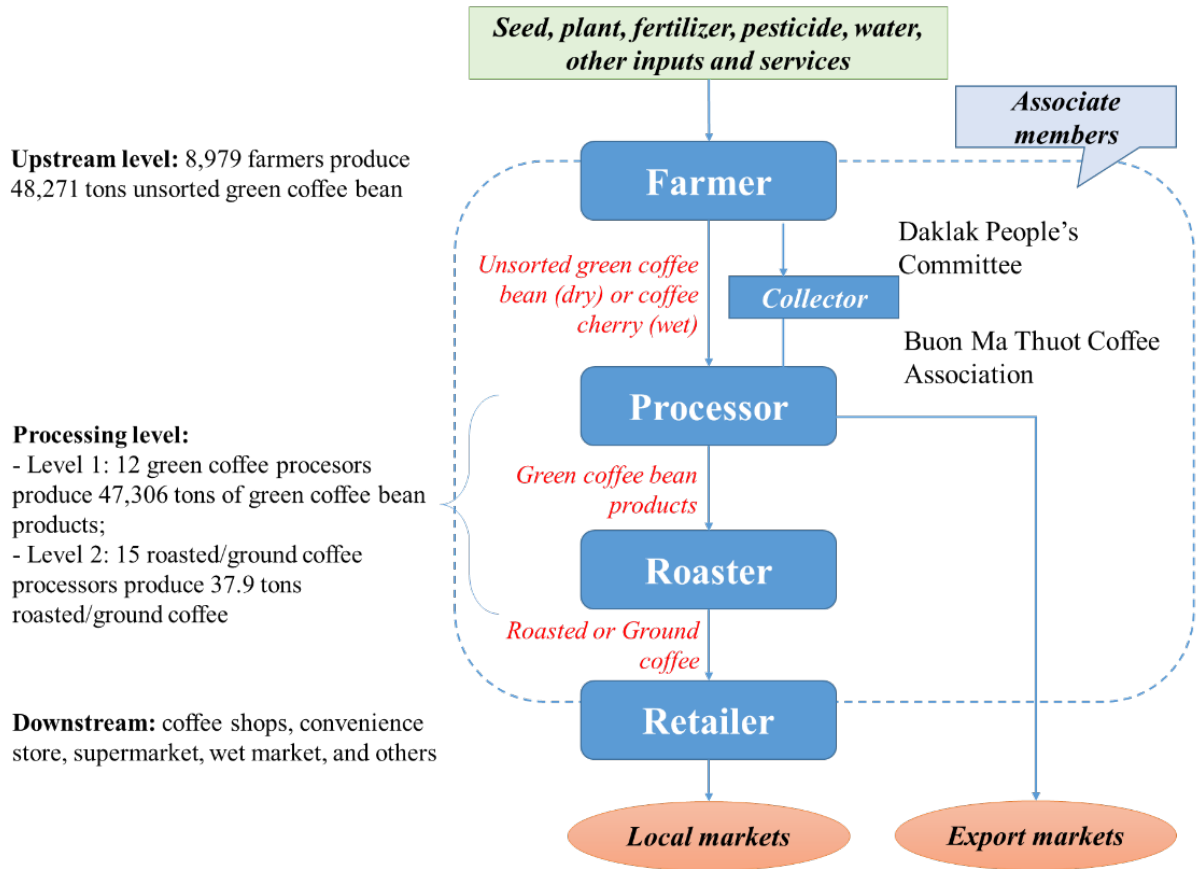
Overall, the core value chain of Dak Lak coffee includes four main actors: farmers; processors, roasters and retailers. Direct input suppliers provide seed, plant, fertilizer, pesticide, and water and collectors buy unsorted green coffee beans or coffee cherries from farmers and sell to processors. Most of the large coffee processors purchase coffee directly from farmers while small coffee processors often buy coffee through collectors. Roasters purchases the green coffee directly from the green coffee processors and sells the roasted and ground coffee to retailers or café shops³⁶. The end-user markets include both local market and global market. In addition, there are supporting and other supplying actors in Dak Lak coffee value chain. For example, Buon Ma Thuot Coffee Association (BCA) consists of organizations and individuals producing and trading coffee inside and outside Buon Ma Thuot area, indirect service and input suppliers such as finance, logistics, transport, marketing, and others; and Daklak People's Committee (and its departments) with promotion and supporting policies and programs. Dak Lak coffee value chain may be specifically described as in Figure 1.

³⁵ Hoang, V., & Nguyen, A. (2019). PGI Buon Ma Thuot Coffee in Vietnam. In *Sustainability of European Food Quality Schemes* (pp. 265-285). Springer, Cham.

³⁶ Hoang, V., & Nguyen, A. (2019). PGI Buon Ma Thuot Coffee in Vietnam. In *Sustainability of European Food Quality Schemes* (pp. 265-285). Springer, Cham; Tran et al (2013).

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Figure 1. Dak Lak coffee value chain (Source: Hoang & Nguyen, 2019)



3. Methodology

3.1 Research design

Twenty-seven semi-structured qualitative interviews were carried out in Vietnam and in the EU with expert stakeholders on the EVFTA and the coffee value chain: five scholars, four policy makers, six Vietnamese NGOs, two EU-based NGOs, four farmers unions, three certification agencies and six coffee firms. All interviewees have a deep knowledge and understanding of the sustainability aspects of the EVFTA or of the coffee value chain. The high level of expertise of participants meant that qualitative analysis of open-ended questions allowed more nuanced outcomes than a large survey with quantitative analysis of results. The researchers carrying out the interviews were familiar with the subject matter, enabling them to deepen lines of inquiry where useful to facilitate further insights. Questions were developed in collaboration between the participating Universities, and stakeholders were identified through prior knowledge and networks of the research team. While EU-based experts were identified by the research teams at CREA and the University of Sussex, Vietnamese expert stakeholders were identified by the members of the research team from the University of Economics Ho Chi Minh City (UEH). We also interviewed a senior expert at the European Commission.

We first asked participants other than EVFTA experts ‘Are you aware of the EU-Vietnam FTA’. All participants were aware, and this does not feature in our results. The majority of the semi-structured interviews took the form of open-ended questions. Without replicating these in full, cross-cutting questions fell under the following themes:

- What are the advantages and disadvantages of the EVFTA as a whole, and how does impact upon sustainability in the coffee sector?
- What are the most significant sustainability challenges in the coffee value chain?
- What degree of involvement in the EVFTA TSD chapter activities do stakeholders have, and what are their views on its influence on implementation of Multilateral Environmental Agreements?
- Which types of standards and regulations most shape sustainability in the coffee value chain?

We asked all participants to rate, on a scale of 1-5, propositions about the importance of addressing sustainability in the coffee sector, whether it was a good business strategy, and whether they felt their behaviour could make a difference.

We asked scholars and policymakers with expertise in the EVFTA about environmental issues featured in the Sustainability Impact Assessment, negotiation and implementation of the FTA.

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We asked NGOs views about the most significant environmental issues in the coffee sector. We asked private sector participants more detailed questions about the ways that different regulations and standards influence their activities, and their perceptions of these.

3.2 Data collection

Interviews were carried out between August and November 2022, in English or in Vietnamese, in person or on zoom, reflecting interviewee’s circumstances. Generally, interviews in Europe were conducted by researchers from the University of Sussex and CREA and interviews in Vietnam were conducted by the UEH team. Interviewees gave their consent for the interviews to be recorded, and they were informed that the content of their responses would remain confidential, as quotations would not contain identifying features.

3.3 Data analysis

The few questions we asked that required objective ratings provided useful benchmarks for assessing convergence and divergence on various points, and we draw from the results below. However, the task of data analysis was fundamentally the qualitative one of identifying underlying themes. For this reason, in the analysis below, we draw heavily from quotations from individual survey respondents to highlight the specific perceptions and concerns of different actors. We utilise the thematic summary of the questions, set out in the section above, to present these results. Further, we have grouped answers together that responded to different questions where useful to reinforce these core themes.

4. Results

4.1 Advantages and disadvantages of the FTA, and effects on coffee sustainability

There was strong convergence across all stakeholders on the point that the prospect of increased exports and investments were the main advantages of the EVFTA. Many stakeholders believed that the coffee value chain benefits from the EVFTA by helping to improve the quality of coffee and increase its added value and actors’ welfare.

When asked about the main disadvantage of EVFTA, the most common response referred to continued market access difficulties. All NGOs made reference to EU standards, covering restrictions based on fertilizer and pesticide use, due diligence/corporate social responsibility,

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and labour standards. In the private sector (certification agencies, farmers unions and coffee firms), standards and capacity were cited as obstacles. One coffee firm stakeholder said that ‘Local enterprises do not have enough financial capacity; or some firms may have sufficient financial capacity but have not received adequate support to participate in the export markets.’ Two private sector actors reported that, because exports were tariff free, the advantages were still unclear.

Private sector actors pointed to the importance of the contract negotiation as the way in which EU buyers ascertained that standards had been met, and the difficulty of meeting requirements for small and medium firms. For coffee farmers, contract negotiation emerged as the focal point of conformity assessment processes on a range of issues, including not only compliance with SPS (product-related) regulation in issues like pesticide and fertilizer use, but also land use degradation and human rights.

A number of interviewees conflated EU requirements with other requirements they faced. For example, when asked if EU sustainability standards were too high, one coffee farmer responded ‘no, because EU standards are international standards.’ Voluntary standards were often portrayed as playing a crucial role in EU market access. For example, one farmer’s union stakeholder stated that ‘All current sustainability certifications in Vietnam’s coffee industry are set by European NGOs with the support and coordination of major coffee companies.’ Another coffee firm stakeholder stated that ‘In consignments with certificates such as 4C or Rainforest Alliance, traceability and quality must be ensured according to the requirements of EU countries.’

Private sector actors characterized conformity with sustainability standards as emanating from, and easier for, larger producers. One producer stated, ‘Large foreign corporations have invested in raw material areas in Vietnam.... these enterprises know well about sustainable values of the environment and the community responsibilities, and they are willing to contribute to these values.’ Another said, ‘... large businesses have already converted and followed the EU standards and regulations. Only new businesses that have not yet exported to the EU are just starting to improve and change according to the EU standards. Therefore, the EVFTA has an impact on businesses to change their ... production thinking to the environment....’

To the question “do you think that the EVFTA sufficiently pays attention to important sustainability issues in general and to environmental problems in Vietnam?”, all scholars, policy makers and NGOs (the question was not asked to the private sector) answered “yes”, but 6 out of 7 scholars referred to high standards in agricultural products rather than to the TSD chapter. The same pattern was observed when stakeholders were asked to evaluate whether the

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EVFTA could improve environmental sustainability in Vietnam, and in particular in the coffee value chain.

Some scholars also underlined that the ability of the EVFTA to improve sustainability in the coffee value chain would depend on the ability of Vietnamese firms to comply with higher sustainability standards.

4.2 The most significant sustainability challenges in the coffee value chain

There was a high level of convergence amongst stakeholders: Misuse or overuse of pesticides and fertilizers, excessive use of groundwater, land degradation, deforestation and biodiversity loss were named by all different groups as the most significant environmental problems resulting from coffee production. Among NGOs there was a higher likelihood of mentioning deforestation and biodiversity loss; among private sector actors there was a higher likelihood of mentioning pesticide and fertilizer overuse.

4.3 Degree of involvement in the EVFTA TSD chapter activities, and influence on implementation of Multilateral Environmental Agreements

Whereas the EU bases its trade and sustainability policy on cooperation and dialogue, there was little evidence that cooperation mechanisms instituted by the EVFTA TSD chapter have been used in practice by coffee sector stakeholders. Only four stakeholders that we interviewed were involved in the pre-ratification Sustainability Impact Assessment (SIA), the EVFTA negotiation process or the Vietnamese DAG or Civil Society Forum. Very few stakeholders were “aware of, or involved in, any projects, activities or trainings to promote the sustainable forests and the sustainable coffee value chains as a result of the EVFTA”.

When asked about EU trainings, some of the private sector actors brought up trainings that had been held to help them comply with voluntary sustainability standards. For example, one farmers union stated that ‘...we have received certifications such as 4C, Rain Forest, Fair Trade or UTC and our coffee products can be sold in the European market. Our members receive specific training and guidance on topics such as no child labor, input use, farming and harvesting techniques, farming and work safety.’

While the EVFTA reaffirms both Parties’ commitments to implementing a number of Multilateral Environmental Agreements, many participants felt unsure about how the FTA

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impacted upon the Paris Agreement or the Convention on Biological Diversity and declined to answer the question. Scholars and policymakers had the strongest positive response about the role of the FTA in reinforcing MEAs both explicitly in the text and through supporting sustainable practices more generally.

4.4. Which types of regulations most shape sustainability in the coffee value chain?

When stakeholders were asked to identify the one instrument which most directly influences environmental sustainability in the coffee value chain (between EVFTA, Private standards, EU environmental regulations or Vietnamese environmental regulations), the most common response was private standards. However, nearly all stakeholders replied that it was difficult to identify a single one. They underlined that these instruments all worked in combination with the others and that they could not be isolated from the whole trade and sustainability framework. For example, “The EVFTA alone cannot ensure the environmental sustainability of the coffee value chain. New regulations from the EU are expected to significantly contribute to coffee sustainability”.

4.5 Sustainability standards as a good business strategy

Stakeholders considered that improving sustainability is a good business strategy: whether they be coffee producers, farmers unions, scholars, policy makers or NGOs, they all rated this proposition 4 or 5 out of 5. Stakeholders in Vietnam also indicated they are well aware of the fact that European consumers have high expectations regarding the conditions in which the coffee that they buy has been produced. This quote from one of our interviews describes the interaction between standards, sustainability and economic profits:

The EVFTA additionally opens up a high-quality and high-value coffee market (...). The EVFTA creates opportunities for businesses that focus on producing high-quality coffee products, following sustainable standards, and creating their own brand name to be able to enter the market at a higher price. This is a huge opportunity for companies that produce specialty coffee, Arabica coffee, and deep-processed coffee products, e.g., mixed instant coffee to create quality products and brand name in the European market.

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Another person underlined that before the EVFTA, only high-quality coffee was certified and respected sustainability standards, but that now, most coffee value chains have to respect them in order to be exported to Europe.

Comments from stakeholders suggest that the interest in sustainability is driven by a desire to access the EU market, but also an intrinsic sense that sustainable production is better for Vietnam. Vietnamese stakeholders were willing to increase sustainability in the coffee value chain and felt that it constitutes an economically rational strategy.

5. Qualitative study findings

5.1 The conflation of sustainability standards

One notable theme of responses is the influence of private voluntary standards, which seem to function or be perceived by many private sector actors as *de facto* mandatory to achieve market access. Many mentioned international certification programmes, including 4C and Fairtrade, as driving sustainable practices in the sector. Responses suggested that the reason for this is that private sector actors who negotiate contracts often require that farmers comply with such schemes. Further, many of the responses did not make any distinction between private standards or EU unilateral legislation, experiencing compliance as resulting from the same processes. The ability of the Vietnamese coffee sector to comply with EU's high sustainability requirements constituted a major concern, but it was not linked to a particular instrument. Rather, farmers viewed sustainability requirements holistically. Further, it was clear from responses that many of these schemes provide trainings for farmers which have been very helpful for them in achieving market access requirements.

5.2 The need for capacity building

Despite the fact that many producers were aware of sustainability requirements, there was a clear concern expressed about many actors in the value chain who were unable to comply with such standards, pushing down both prices and perceptions of Vietnamese coffee exports. These notably stemmed from a lack of knowledge and information about sustainability requirements. Stakeholders underlined the need to receive information and training in order to be able to know and comply with the new rules. The interviewee from the Commission underscored that Vietnamese stakeholders had expressed concern about the impacts of the Deforestation Free Commodities Regulation on the coffee sector.

5.3 Using the TSD chapter more effectively: the example of the Deforestation Free Commodities Regulation

While the interviews we conducted focused largely on existing sustainability regulation, forthcoming EU regulation promises to be even more impactful. Most relevant to this article, the EU's new Deforestation Free Commodities Regulation introduces a due diligence obligation (art. 8), paired with a country benchmarking system (art. 27) that categorizes countries as high and low risk, for commodities that are the main drivers of global forest loss – which include coffee (as well as cattle, cocoa, oil palm, soya and wood³⁷).

Operators' obligations vary depending on the level of risk that the country of production represents, with simplified due diligence duties for low risk and enhanced scrutiny for high-risk countries. Placing or making available on the EU market relevant commodities or products that are not compliant with the proposed Regulation is prohibited (art. 3 and art. 10(1)). As a result of these instruments, all Vietnamese coffee exporters, including smallholders, will bear new obligations, and will risk possible sanctions if they fail to comply with the new rules.

As the above discussion shows, stakeholders are willing and interested to uphold sustainability in the coffee value chain; they are however worried not to be able to comply with sustainability standards. Thus far, the TSD chapter in EVFTA does not seem to be effective on its own, but it nonetheless offers cooperation and dialogues mechanisms which could be used more effectively. This suggests the need to use TSD chapters more effectively as a forum to involve stakeholders in the preparation and implementation of other types of instruments fostering sustainability. Doing so would echo a recent report from Europe Jacques Delors calls for greater harmonization, and integration of EU bilateral (FTA) and unilateral efforts to green trade.³⁸ This would help reach the Commission's new trade policy objectives, to which it has promised to devote additional resources³⁹: levelling up the country-specific approach.

This cooperation in regard to EU's unilateral instruments could take place both *ex-ante*, to feed in third-party concerns and perspectives on the appropriateness of EU regulation, and *ex-post*, to help stakeholders meet EU standards.

³⁷ Relevant products are those listed in Annex I, that contain, have been fed with or have been made using relevant commodities.

³⁸ <https://www.europejacquesdelors.eu/fr/publications/greening-trade-13>

³⁹ EU Commission, Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2022) 409 final, 2022.

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In the context of FTAs, the Commission underlined on several occasions that in order to effectively participate in the design of TSD Chapters, civil society and interest groups must be involved since the negotiation stage⁴⁰. This early participation should enable them to raise important sustainability issues and to suggest appropriate measures. In her foreword to the EU's Handbook for Trade Sustainability Impact Assessment, Commissioner Malmström underlined the “importance of close dialogue with all relevant stakeholders, including the more vulnerable ones. These exchanges are essential to capture the wider implications of our policy choices and to prevent unintended side-effects. With this prevention-driven approach, we can ensure that our trade policy genuinely works for all”⁴¹.

In the context of FTAs, this *ex-ante* consultation process is undertaken during the Sustainability Impact Assessments (SIAs). Different studies identify a series of shortcomings of this process, including the limited extent and depth of treatment of environmental concerns, the shortcomings in available data, and constraints on resources⁴². SIAs are broad, due to the large scope of FTAs, making it difficult to address in detail every impacted area.

In the context of more specific instruments, the TSD committees established by such FTAs, including the Domestic Advisory Group and the Civil Society Forum, could be highly valuable, as local stakeholders could help identify the potential negative impacts of such instruments in exporting countries and could be involved in drafting the text in a way that would enable a realistic implementation, satisfying for both parties. A European NGO underlines, in the context of the successful cooperation which took place under the FLEGT process, that

⁴⁰ European Economic and Social Committee (EESC), Opinion on trade and sustainable development chapters (TSD) in EU Free Trade Agreements (FTA), 2017, §1.2.

⁴¹ European Commission, DG Trade, Handbook for Trade Sustainability Impact Assessment, 2nd edition, 2016, p. 3. All ongoing and completed SIAs are available on the European Commission's dedicated website: https://policy.trade.ec.europa.eu/analysis-and-assessment/sustainability-impact-assessments_en

⁴² Typical strengths and limitations of available SIA methods have been summarized by the OECD in a comprehensive comparative table: Moïse Evdokia, Rubinova Stela, Sustainability Impact Assessments of Free Trade Agreements: A Critical Review, OECD Trade, Policy Paper n°255, 2021, p. 5. See also: Amos Rob, Lydgate Emily, Assessing Sustainability Impacts of Trade Agreements, Sussex Sustainability Research Programme (SSRP), University of Sussex and Institute of Development Studies, 2020; Kettunen Marianne, Bodin Eloïse, Davey Ellie, Gionfra Susanna, Charveriat Céline, An EU Green Deal for trade policy and the environment: Aligning trade with climate and sustainable development objectives, Institute for European Environmental Policy, 2020, pp. 21 and 29; Hoekman Bernard, Rojas-Romagosa Hugo, EU Trade Sustainability Impact Assessment - Revisiting the Consultation process, Journal of International Economic Law, Vol. 25, 2022, pp. 45-60; Amos Rob, Lydgate Emily, Trade, transboundary impacts and the implementation of SD12, Sustainability Science, Vol. 15, pp. 1699-171; Reynaud Patrick, Sustainable Development and Regional Trade Agreements: Toward Better Practices in Impact Assessments, McGill International Journal of Sustainable Development, Vol. 8(2), 2013, pp. 205-243.

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“[r]einforcing national sovereignty helps build ownership and gives a sense of fairness”⁴³. While it is too late now, such a mechanism could have been useful in the context of the Deforestation Free Commodities Regulation. A Côte d’Ivoire-based NGO underlined that “[t]he goals of the proposed EU Regulation on deforestation-free products are commendable. A major problem, however, is the lack of consultation involved in drafting it: this was not done in a consultative way, and our national government was not sufficiently involved.”⁴⁴

Several implementation hurdles may be avoided by a strong *ex-ante* cooperation process. This cooperation and dialogue should nevertheless continue after the entry into force of the particular piece of legislation, in order to monitor its implementation, and, most importantly, help local stakeholders adapt to the new rules. As already mentioned, the FLEGT Facility, which supported the implementation of the FLEGT Action Plan, is often quoted as a good example of cooperation⁴⁵. Its activities consisted in informing exporting countries, supporting national dialogue, advising partner countries, assisting in strengthening the partner countries’ capacity to meet the VPA’s requirements, building and disseminating knowledge and information. This process could be used as an inspiration for future implementation projects.

These tools could be used to share information and knowledge about the new requirements, especially with small-holder farmers, which appear to be generally uninformed about the project⁴⁶. A Vietnamese NGO describes in detail the reasons why coffee farmers and coffee Associations are not aware of the upcoming changes: they often do not know what supply chains they belong to, they do not speak English, they work in remote areas where communication tools are rare. The NGO concludes that it is important “to organize supply chain meetings and work out a mechanism to make sure that our target groups can comply with

⁴³ <https://efi.int/partnerships/euflegt>

⁴⁴ Fern, EU Deforestation Regulation must strengthen the FLEGT process and producer countries’ own efforts to combat deforestation, 21 November 2022, <https://www.fern.org/publications-insight/eu-deforestation-regulation-must-strengthen-the-flegt-process-and-producer-countries-own-efforts-to-combat-deforestation-2589/>

⁴⁵ See for instance: FERN, EU Deforestation Regulation must strengthen the FLEGT process and producer countries’ own efforts to combat deforestation, 21 November 2022, <https://www.fern.org/publications-insight/eu-deforestation-regulation-must-strengthen-the-flegt-process-and-producer-countries-own-efforts-to-combat-deforestation-2589/>

⁴⁶ FERN, EU Deforestation Regulation must not imperil Vietnam’s coffee farmers’ livelihood, 15 December 2022. Available at: <https://www.fern.org/publications-insight/eu-deforestation-regulation-must-not-imperil-vietnams-coffee-farmers-livelihoods/>

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any requirements, and ultimately benefit from a shorter and more equitable supply chain”. There is the risk that without such actions, the EU might not be able to reach its objectives⁴⁷.

In light of this, the decision, during the 2022 EVFTA DAG to DAG meeting, to create a DAG working group on due diligence & supply chains, in view of the adoption of the due diligence legislation, appears like a positive step towards the consolidation of the interrelation between the two sets of instruments⁴⁸. Following their second meeting, the EU and the Vietnam Domestic Advisory Groups issued the following joint statement: “In light of the discussions on possible future areas of work in the Committee on Trade and Sustainable Development, the implementation of the TSD Chapter remains central to the EU DAG, but should also take into account the recent European Commission communication on the implementation and enforcement of TSD chapters in the EU's trade agreements, the European Parliament resolutions and Council conclusions, and ensure consistency with upcoming EU initiatives, namely on forced labour, due diligence and deforestation-free products. In this regard, it was agreed in the DAG-to-DAG meeting that a joint working group would be established to deepen mutual understanding on the topic of EU-Vietnam supply chains and due diligence”⁴⁹.

Another potential benefit of utilizing TSD chapters as a nexus for capacity-building activities is that it depoliticises discussions. This element confirms Ha Thu & Schweissheim’s work, which shows that intergovernmental and civil society dialogue and cooperation in Vietnam seem to be far from satisfactory to ensure that TSD provisions are implemented and enforced. The authors demonstrate that the representativeness and internal procedures of the Vietnamese DAG are problematic and that civil society – in particular trade unions – have not been effectively able to participate in the monitoring of the agreement⁵⁰. Based on the same observation, the EU DAG addressed a letter to the Vietnamese Ministry of Industry and Trade in September 2021, expressing concerns about the functioning of the Vietnamese DAG.

⁴⁷ FERN, EU Deforestation Regulation must not imperil Vietnam’s coffee farmers’ livelihood, 15 December 2022. Available at: <https://www.fern.org/publications-insight/eu-deforestation-regulation-must-not-imperil-vietnams-coffee-farmers-livelihoods/>

⁴⁸ Joint Statement of the 2nd meeting of the EU Domestic Advisory Group and the Viet Nam Domestic Advisory Group under the EU-Viet Nam FTA, 18 October 2022. Available at: https://www.eesc.europa.eu/sites/default/files/files/2nd_eu-vietnam_dag-to-dag_meeting_18_october_2022_joint_statement.pdf

⁴⁹ Joint Statement of the 2nd meeting of the EU Domestic Advisory Group and the Viet Nam Domestic Advisory Group under the EU-Viet Nam FTA, 18 October 2022. Available at: https://www.eesc.europa.eu/sites/default/files/files/2nd_eu-vietnam_dag-to-dag_meeting_18_october_2022_joint_statement.pdf

⁵⁰ Ha Thu Mai, Schweissheim Erwin, Labour Rights and Civil Society Empowerment in the EU-Vietnam Free Trade Agreement, Berlin School of Economics and Law, Working Paper N°115, 2020.

6. Conclusion

Unlike labour standards provisions, which are cross-cutting, environmental provisions identify particular environmental problems for discussion. As set out above, the EU has framed TSD chapters as a projection of EU values, that ultimately aims to raise standards.

In the EU agri-food regulation, market access requirements for compliance with what were traditionally understood as ‘non-product related’ environmental standards and requirements is expanding. This is illustrated starkly by the recent Deforestation-free Commodities Regulation, such that environmental regulation, in the form of national deforestation law and enforcement, is now central to market access. This challenges the traditional dichotomy in EU trade policy, where such non-product related environmental standards are discussed through high-level commitments to uphold environmental protection and cooperative mechanisms such as discussion fora. It situates so-called non-product standards more centrally as part of the ‘business’ of EU FTAs; namely, facilitating market access through addressing regulatory barriers to trade.

This suggests the need – and opportunity – for an update in the focus and purpose of TSD chapters. While some of the issues that arise in this article are sector- and country-specific, the need for capacity building is more generally applicable. The analysis of the EU-Vietnam FTA TSD chapter’s impact on coffee production in Vietnam tends to show that it has had little influence on sustainability in this sector. Given the importance of trainings, information and support to help stakeholders comply with EU requirements, this article suggested using the cooperation and dialogue mechanisms instituted by EVFTA TSD chapter to support the implementation of EU’s sustainability regulation.

TSD chapters can provide a forum through which the EU conducts capacity-building directed at aiding exporters in adapting to EU regulation and standards. In the example of the coffee value chain, coffee producers underlined that the ability of the EU to reach its sustainability objectives depends in large part on their capacity to understand and comply with these requirements. The reverse scenario would indeed constitute a lose-lose situation: Vietnam would face the economic consequences of not being able to export its coffee to the EU, and the EU would be deprived of its first source of coffee, which currently amounts to about 24% of the coffee consumed on the continent⁵¹.

Another major question is whether the EU should be prepared to accept core voluntary standards as sufficient to certify compliance with its unilateral requirements in some cases.

⁵¹ European Coffee Federation, European Coffee Report 2018/2019, 2019, p. 18.

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Doing so would cut down on compliance requirements, but leaving NGOs in charge of standards might be seen as less than desirable by many actors. While stakeholders we interviewed suggested that voluntary standards are in some cases *de facto* mandatory, in other cases they are becoming *de jure* mandatory. For example, in the EFTA-Indonesia FTA, Indonesia agreed that its palm oil must be certified by recognized voluntary sustainability certification schemes in order to be exported to EFTA countries. We leave further discussion of this question for future articles.

The European Commission has recognised the limits of its established approach to TSD chapters. Elements of its reform proposals suggest a pivot in this direction – eg. need to be more specific about supply chains. The cooperation we propose could also prevent the EU from facing the often-raised critique, that Europe – instead of liberalizing its economy through free trade agreements – uses sustainability arguments to hide its protectionist agenda and thus shields its economy from cheap imports⁵². Indeed, if it took careful and appropriate steps to include its trade-partners in the conceptualisation, drafting and implementation of such rules, it would follow a more inclusive and egalitarian approach to international trade.

⁵² Nguyen Thi Nhung, Hai Yen Trinh, Demystifying the Sustainable Development Chapter in the EU-Vietnam FTA, *Legal Issues of Economic Integration* Vol. 49(2), 2022, pp. 217–236; McNeill Jeffrey, Exporting environmental objectives or erecting trade barriers in recent EU free trade agreements, *Australian and New Zealand Journal of European Studies*, Vol. 12(1), 2020; Smith Adrian, Harrison James, Campling Liam, Richardson Ben, Barbu Mirela, *Free Trade Agreements and Global Labour Governance: The European Union's Trade-Labour Linkage in a Value Chain World* (Routledge), 2020, p. 139.

Appendix

A. Interview questions

QUESTIONS FOR CERTIFICATION AGENCIES

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at certification agencies. This is a part of the TRADE4SD research project whose objective is to identify new opportunities to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

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There will be no right or wrong answer. They are in-depth and open-ended questions. Please answer the following questions from the perspectives and thinking in the field and activities in which you participate. Estimated time to answer the questionnaire is about 30 minutes.

If you have any questions about the survey or need more information about this research project, please contact: Dr. Hoang Van Viet, e-mail: viet.hoang@ueh.edu.vn

Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

QUESTIONS

1. Are you aware of the FTA between the EU and Vietnam (EVFTA)?

- Yes No

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2. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?
3. Do you think that the EVFTA can improve environmental sustainability? If so, how and to what extent?
4. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?
5. Do you believe that the Corporate Social Responsibility / Responsible Business Conduct (CSR/RBC) model has been reinforced in the coffee value chain as a result of the EVFTA?
6. Is your certification criteria and certification process influenced or affected by national agri-food or environmental regulatory requirements in the EU and/or in VietNam? If so, how?
7. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)
 - Private standards (Global GAAP, UTZ) EVFTA
 - Vietnamese environmental regulation EU environmental regulation
8. How much do you agree with the following statements (1 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	○	○	○	○	○
The coffee value chain contributes to the degradation of the environment	○	○	○	○	○
Through my activities, I can participate in the protection of the environment	○	○	○	○	○
Through my activities, I can participate in the fight against deforestation	○	○	○	○	○
It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	○	○	○	○	○

The end and thank you again for your kind contribution!

QUESTIONS FOR COFFEE FIRMS

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at coffee firms (processors, traders, importers and exporters). This is a part of the TRADE4SD research project whose objective is to identify new opportunities

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to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

This questionnaire is for research purposes only. The data will be managed and analyzed anonymously and confidentially. Only the research team can see the answers, no one else will. Your personal identity will not lead to an answer during data analysis, and this study is reported in such a way that it is not possible to personally identify respondents. Data can only be stored on the servers of the University of Sussex UK and the University of Economics Ho Chi Minh HCM City Vietnam. You can stop answering or skip a question at any time.

There will be no right or wrong answer. They are in-depth and open-ended questions. Please answer the following questions from the perspectives and thinking in the field and activities in which you participate. Estimated time to answer the questionnaire is about 30 minutes.

If you have any questions about the survey or need more information about this research project, please contact: Dr. Hoang Van Viet, e-mail: viet.hoang@ueh.edu.vn

Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

QUESTIONS

1. Are you aware of the FTA between the EU and Vietnam (EVFTA)?
 Yes No
2. Can you briefly summarise the main advantages and disadvantages of the EVFTA in general?
3. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?
4. Do you believe that sustainable practices are improved in the coffee value chain as a result of the EVFTA?
5. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?
6. Have you participated in any projects or trainings to promote sustainable forests and coffee integrated systems as a result of this FTA? If so, have resources been made available, and who provided them?
7. If you have done so, what is the practical significance/benefits of these projects, activities or trainings for you?
8. Have you undertaken any projects, activities or trainings on sustainable development in relation with trade partners other than the EU? If so, who has financed those activities?
9. Have you made any changes in your activities as a result of the EVFTA to achieve sustainable development related goals?

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10. Do you think that the EU requires too much from the Vietnamese coffee value chain in terms of environmental and/or social standards?

11. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)

- Private standards (Global GAAP, UTZ)
- EVFTA
- Vietnamese environmental regulation
- EU environmental regulation

12. How much do you agree with the following statements (1 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The coffee value chain contributes to the degradation of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the fight against deforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The end and thank you again for your kind contribution!

QUESTIONS FOR FARMER UNIONS

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at farmer unions. This is a part of the TRADE4SD research project whose objective is to identify new opportunities to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

This questionnaire is for research purposes only. The data will be managed and analyzed anonymously and confidentially. Only the research team can see the answers, no one else will. Your personal identity will not lead to an answer during data analysis, and this study is reported in such a way that it is not possible to personally identify respondents. Data can only be stored on the servers of the University of Sussex UK and the University of Economics Ho Chi Minh HCM City Vietnam. You can stop answering or skip a question at any time.

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There will be no right or wrong answer. They are in-depth and open-ended questions. Please answer the following questions from the perspectives and thinking in the field and activities in which you participate. Estimated time to answer the questionnaire is about 30 minutes.

If you have any questions about the survey or need more information about this research project, please contact: Dr. Hoang Van Viet, e-mail: viet.hoang@ueh.edu.vn

Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

QUESTIONS

1. Are you aware of the FTA between the EU and Vietnam (EVFTA)?
 Yes No
2. Can you briefly summarise the main advantages and disadvantages of the EVFTA in general?
3. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?
4. Do you think that the EVFTA sufficiently pays attention to important environmental problems in Vietnam? If not, what is missing?
5. Do you think that the EVFTA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the coffee value chain?
6. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?
7. Did you play any role in the negotiation of the EVFTA? If so, how did you participate?
8. Have you participated in the Domestic Advisory Group (DAG) or Civil Society Forum (CSF) of the EVFTA? If so, what environmental issues have arisen on the agenda?
9. If not, have you participated in any other activity to address deforestation or coffee integrated supply chains that was organised as a result of the EVFTA? If so, what were the activities, how were they funded, and who participated?
10. If you participated in any projects, activities or trainings as a result of this FTA, what was their practical benefit for you?
11. Do you think that the EU requires too much from the Vietnamese coffee value chain in terms of environmental and/or social standards?
12. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)
 Private standards (Global GAAP, UTZ) EVFTA
 Vietnamese environmental regulation EU environmental regulation

13. How much do you agree with the following statements (1 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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The coffee value chain contributes to the degradation of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the fight against deforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The end and thank you again for your kind contribution!

QUESTIONS FOR NGOS

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at NGOs. This is a part of the TRADE4SD research project whose objective is to identify new opportunities to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

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If you have any questions about the survey or need more information about this research project, please contact: Dr. Hoang Van Viet, e-mail: viet.hoang@ueh.edu.vn

Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

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QUESTIONS

1. Are you aware of the FTA between the EU and Vietnam (EVFTA)?
 Yes No
2. Can you briefly summarise main advantages and disadvantages of the EVFTA in general?
3. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?
4. Do you think that the EVFTA sufficiently pays attention to important environmental problems in Vietnam? If not, what is missing?
5. Do you think that the EVFTA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the coffee value chain?
6. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?
7. Do you think that the EVFTA influenced the implementation of Multilateral Environmental Agreements (MEAs), such as the Paris Agreement, Convention on Biological Diversity, or CITES?
8. How you think that the EVFTA can influence the implementation of Multilateral Environmental Agreements (MEAs)? (1 = not at all; 5 = very strongly)

Multilateral Environmental Agreements	1	2	3	4	5	Don't know
Paris Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convention on Biological Diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CITES of Wild Fauna and Flora	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stockholm Convention on Persistent Organic Pollutants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Did you play any role in the negotiation of the EVFTA? If so, how did you participate?
10. Have you been involved in the Domestic Advisory Group or Civil Society Forum? If so, what environmental issues have arisen on the agenda?
11. Have you participated in the EVFTA Sustainability impact assessment (SIA)?
12. If you are familiar with the SIA, do you think it includes all important sustainability or environmental problems in Vietnam? If not, what is missing?
13. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)
 Private standards (Global GAAP, UTZ) EVFTA
 Vietnamese environmental regulation EU environmental regulation

14. How much do you agree with the following statements (0 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The coffee value chain contributes to the degradation of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the fight against deforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	○	○	○	○	○
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The end and thank you again for your kind contribution!

QUESTIONS FOR POLICY MAKERS

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at policy makers. This is a part of the TRADE4SD research project whose objective is to identify new opportunities to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

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There will be no right or wrong answer. They are in-depth and open-ended questions. Please answer the following questions from the perspectives and thinking in the field and activities in which you participate. Estimated time to answer the questionnaire is about 30 minutes.

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Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

QUESTIONS

1. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?

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2. Do you think that the EVFTA sufficiently pays attention to important sustainability and environmental problems in Vietnam? If not, what is missing?
3. Do you think that the EVFTA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the coffee value chain?
4. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?
5. Do you think that the EVFTA influenced the implementation of Multilateral Environmental Agreements (MEAs), such as the Paris Agreement, Convention on Biological Diversity, or CITES?
6. How do you think that the EVFTA can influence the implementation of Multilateral Environmental Agreements (MEAs)? (1 = not at all; 5 = very strongly)

Multilateral Environmental Agreements	1	2	3	4	5	Don't know
Paris Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convention on Biological Diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CITES of Wild Fauna and Flora	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stockholm Convention on Persistent Organic Pollutants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Are you aware of any projects or trainings to promote sustainable forests and coffee integrated systems as a result of the EVFTA? If so, have resources been made available, and who provided them?
8. Have you participated in the EU's EVFTA Sustainability Impact Assessment (SIA)?
9. If you're familiar with the SIA, do you think that it includes all important sustainability/environmental problems in Vietnam? If not, what is missing?
10. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)
 - Private standards (Global GAAP, UTZ)
 - EVFTA
 - Vietnamese environmental regulation
 - EU environmental regulation
11. How much do you agree with the following statements (1 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The coffee value chain contributes to the degradation of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the fight against deforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The end and thank you again for your kind contribution!

QUESTIONS FOR SCHOLARS

We invite you to answer questions about the sustainability effectiveness of the Vietnam - EU Free Trade Agreement (EVFTA) and the relationship between the EVFTA and the sustainable development of the coffee value chain. We would love to know your views, perspectives, and assessment!

This questionnaire is aimed at scholars. This is a part of the TRADE4SD research project whose objective is to identify new opportunities to promote the positive sustainable impacts of trade at the national, regional (EU) and multilateral levels to achieve economic, social, and environmental sustainable development goals (SDGs). For more details, you can refer to the project website: <https://www.trade4sd.eu/>

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There will be no right or wrong answer. They are in-depth and open-ended questions. Please answer the following questions from the perspectives and thinking in the field and activities in which you participate. Estimated time to answer the questionnaire is about 30 minutes.

If you have any questions about the survey or need more information about this research project, please contact: Dr. Hoang Van Viet, e-mail: viet.hoang@ueh.edu.vn
Sincerely and thank you for your participation!

I consent to the use of my responses for research purposes.

- Yes No

QUESTIONS

1. Can you briefly summarise main advantages and disadvantages of the EVFTA in general?
2. Do you believe that the coffee value chain benefits from the EVFTA? If so, why, and to what extent?
3. Do you think that the EVFTA sufficiently pays attention to important environmental problems in Vietnam? If not, what is missing?
4. Do you think that the EVFTA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the coffee value chain?
5. What do you see as the major negative environmental issues resulting from the coffee value chain in Vietnam?

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6. Do you think that the EVFTA influenced the implementation of Multilateral Environmental Agreements (MEAs), such as the Paris Agreement, Convention on Biological Diversity, or CITES?
7. How do you think that the EVFTA can influence the implementation of Multilateral Environmental Agreements (MEAs)? (1 = not at all; 5 = very strongly)

Multilateral Environmental Agreements	1	2	3	4	5	Don't know
Paris Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convention on Biological Diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CITES of Wild Fauna and Flora	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stockholm Convention on Persistent Organic Pollutants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Have you undertaken any analysis or research of the EVFTA? If so, please briefly describe your area of focus.
9. Are you aware of any projects or trainings to promote sustainable forests and the coffee value chains as a result of the EVFTA? If so, have resources been made available, and who provided them?
10. Are you familiar with the EU's Sustainability Impact Assessment of the EVFTA? If so, do you think it includes all important problems of sustainability in general and environmental sustainability in Vietnam? If not, what is missing?
11. Which one most directly influences environmental sustainability in the coffee value chain? (Select one)
- Private standards (Global GAAP, UTZ) EVFTA
- Vietnamese environmental regulation EU environmental regulation

12. How much do you agree with the following statements (1 = not at all; 5 = completely)

Statements	1	2	3	4	5
The coffee value chain plays an important role in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The coffee value chain contributes to the degradation of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the protection of the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through my activities, I can participate in the fight against deforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a good business strategy for the actors in the coffee value chain to increase environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The end and thank you again for your kind contribution!

TRADE4SD

Fostering the positive linkages between trade and sustainable development

Programme: H2020-EU.3.2.1.3. - Empowerment of rural areas, support to policies and rural innovation

Topic: RUR-21-2020 - Agricultural markets and international trade in the context of sustainability objectives

Call: H2020-RUR-2020-2

Type of action: Research and Innovation Action (RIA)

Duration of the project: 01 June 2021 – 31 May 2025

Deliverable 2.2:

Sustainability of Cocoa Value Chain: An Analysis of the EU-Ghana Economic Partnership Agreement

Camille Vallier¹, §Emily Lydgate¹, Ralph Armah², Emmanuel Abbey², Mawuenyega M. Butu², Peter Quartey², Festus E. Turkson², Tiziana Pirelli³, Annalisa Zezza³ and Federica Demaria³.

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Workpackage No. 2.

Due date: 30 November 2023 (M30)

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Dissemination level: Public

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Case Study Ghana - Cocoa

Project Consortium

No.	Participant Organisation Name	Country
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Sustainability of Cocoa Value Chain: An Analysis of the EU-Ghana Economic Partnership Agreement

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1. Introduction

1.1 Scope of the study

As opposed to the EU-Vietnam Agreement, which is a free trade agreement (FTA), the EU-Ghana Agreement is a reciprocal (at least in the sense that it is WTO-compliant) Economic Partnership Agreement (EPA). Comparing different types of agreements will thus be interesting in order to determine whether – independently from the content of specific sustainability provisions – the type of agreement at stake also makes a difference in terms of impacts in the partner country.

The Ghana case study will focus on the cocoa value chain and its effects on deforestation. Firstly, in terms of market, cocoa is an interesting commodity: Ghana is the second world producer of cocoa (9% of its GDP⁵³), cocoa is the main agricultural good exported from Ghana to the EU, and the EU accounts for 60% of cocoa world imports⁵⁴. Secondly, cocoa production is an important source of deforestation. It is estimated that Ghana lost over 60% of its forest cover since the 1950s, including 16% between 1990 and 2020, amounting to 2-3% per year over the last 15 years⁵⁵. “Conversion of forests to agricultural land, and to cocoa cultivation, has been identified as the primary driver of deforestation. Although there is no consensus on the number, it is estimated that between 15 and 30% of cocoa area under cultivation is in forest areas”⁵⁶. A recent report issued in relation to the EU proposed regulation on deforestation-free products identified that cocoa is responsible for 7.5% of EU-driven deforestation globally⁵⁷.

Moreover, maintaining preferential access to the EU market for several goods, including processed cocoa, is the main reason why Ghana concluded an EPA with the EU in 2016⁵⁸. Finally, the EU, Ghana and Côte d’Ivoire have endorsed a new Alliance on sustainable cocoa

⁵³ Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d’Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 12.

⁵⁴ EU Commission, EU-Ghana Economic Partnership Agreement – Creating Opportunities for EU and African Businesses, 2020, p. 4; Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d’Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 12.

⁵⁵ Qualified Preliminary EU-ACP SIA of the EPAs: Phase 1 (final report), 2004, p. 117; Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d’Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 12; Cocoa Talks, Report of the 3rd meeting on deforestation, 2021, p. 3.

⁵⁶ Sustainable Cocoa Initiative, Cocoa Talks, 3rd meeting on deforestation report, 2021, p. 3.

⁵⁷ EU Commission, Proposal for a Regulation of the European Parliament and of the Council on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010, COM(2021)706 final, p. 27.

⁵⁸ Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d’Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 2.

in June 2022, and it will be interesting to examine how this new development interacts with the EPA⁵⁹.

1.2 Research design

Our research aims at examining how non-product related agricultural issues are addressed in EU FTAs, and how effective the EU collaborative approach to TSD chapters is.

In the case of Ghana, we will first examine the SIA content, in order to answer the following question: Do Sustainability Impact Assessments include and address all relevant potential environmental impacts of the agreement under negotiation? Second, we will compare the European Union-Vietnam Free Trade Agreement's (EVFTA) sustainability provisions with the content of the SIA to determine to what extent has the SIA been influential in shaping sustainability provisions. In the case of the EU-Ghana EPA, these provisions are limited to a few non-binding references to sustainable development, which will thus raise a series of questions:

- *Why was no TSD chapter included in the EPA?*
- *Are the sustainability issues raised by the SIA addressed by a different (and more effective) means?*
- *What is the relation between these other mechanisms and the EPA?*

Third, we will evaluate the implementation of relevant alternative mechanisms, in order to answer two sub-questions: Are they translated into effective legal and/or regulatory actions? Have they had practical consequences on the ground?

1.3 Methodology

This study reviews existing literature and provides a desk analysis of various provisions of the EPA and their linkage with SDGs. Specifically, the desk analysis examines the contribution, if any, of the EU-Ghana EPA to sustainable development in Ghana; gauging the extent to which the cocoa value chain has benefited from the agreement.

Further, a qualitative survey based on the methodology developed by Harrison et al., (2019) was conducted to assess the practical impacts of these provisions on the cocoa value chain and deforestation. Overall, ten key informant interviews (out of 18 identified stakeholders) were undertaken following semi-structured interview guides. The interviewed stakeholders comprised five government institutions, two NGOs (one domestic and one international), two farmers' associations, and two development partner organisations.

⁵⁹ EU Commission, DG Trade, EU, Côte d'Ivoire, Ghana and the cocoa sector endorse an Alliance on Sustainable Cocoa, 2022. Available at: https://policy.trade.ec.europa.eu/news/eu-cote-divoire-ghana-and-cocoa-sector-endorse-alliance-sustainable-cocoa-2022-06-28_en

The data from the interviews were analysed based on the research questions and results from the desk review.

2. Desk analysis

2.1 Chronology of the EU-ECOWAS Economic Partnership Agreement

The genesis of the EU's trade partnership with ACP can be traced back to the signing of the Yaoundé Convention I in 1962 between the then European Economic Community (EEC) member states and 17 SSA countries and Madagascar⁶⁰. For over 4 decades the EU-ACP Non-reciprocal agreement went through several renewals/conventions including Yaoundé II (1969-1975), Lomé I, II, III and IV (1975-2000), until 2000 when the Cotonou agreement replaced the Lomé conventions. The Cotonou agreement was signed between the then 15 EU member countries and 77 ACP countries.

The signing of the Cotonou agreement in 2000 was in response to the continuing incompatibility of the Lomé Conventions with GATT and WTO rules for Regional Trade Agreement's (RTA). As noted by Turkson (2015) not only were the preferences not reciprocal but also the eligibility criterion was arbitrary determined by the EU. The Cotonou agreement, was therefore a transformation of the previous conventions into a system of trade and cooperation pacts with individual nations from 2000 to 2020, aimed at ensuring minimal reciprocity to be WTO-complaint as well as support the ACP countries as partners, to reduce and eradicate poverty, and to get well integrated into the world economy through enhanced trade.

The Cotonou Agreement was concluded in 2000 between the EU and African, Caribbean and Pacific (ACP) countries and included preferential tariffs for exports to the EU. It expired in 2007, and it thus became necessary to conclude new agreements with ACP countries to preserve free trade between the EU and its trading partners. The original plan was to conclude regional EPAs with ACP groups of countries (the Caricom, West Africa, and the East African Community (EAC) etc.).

The EU thus negotiated with the Economic Community of West African States (ECOWAS), which includes 15 members – among which Ghana – and was established in 1976 by the Treaty of Lagos. However, the interests and levels of development of ECOWAS countries were too different, and no agreement could be reached: a final version of the ECOWAS EPA was negotiated and agreed upon in 2014, but it did not enter into force for lack of minimal signatures (Gambia, Mauritania and Nigeria did not sign)⁶¹. "Let regional integration take place first, and

⁶⁰ F. E. Turkson, Integration and Regional Trade in Sub-Saharan Africa. In (Eds.)." In Handbook of Trade and Development, by O. Morrissey, R. Lopez and K. Sharma, p. 214. Edward Elgar Publishing Corporation UK and Northampton, MA. USA:

⁶¹ Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d'Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 4.

then only would ACP countries be able to effectively engage with the EU, otherwise the EPAs would undermine, not build on and foster regional integration”⁶².

Instead of concluding a regional EPA with ECOWAS, the EU thus reverted to negotiating interim EPAs with individual countries: as a result, the EU-Ghana iEPA (interim EPA) entered into force in September 2007 and a full EPA in December 2016, and notably includes duty-free and quota-free access of cocoa on the EU market. However, the EU-Ghana EPA is expected to be replaced by the EU-ECOWAS EPA in the future. “The regional EU-West Africa EPA remains the long-term objective of the EU as it is designed to encourage regional integration and the creation of a regional single market”⁶³. The main objective of the iEPAs is to prevent any trade disruption with the EU following the end of the Lomé preferences under the Cotonou Agreement.

2.2 Trade and Sustainable Development Chapter in EU and other country agreements

Following the adoption of the Lomé I partnership agreement in 1975, the introduced STABEX⁶⁴ system allowed ACP countries to be reimbursed for shocks to their export profits resulting from changes in the price of commodities globally or fluctuations in the supply of those commodities. The focus on mining-related trade in Lomé II Agreement (1979) allowed for the creation of a framework to aid ACP countries that predominantly depended on mining for export income. In contrast to Lomé III (1984), which placed greater emphasis on industrial growth, Lomé IV (1985) placed more emphasis on respect for human rights, democratic principles, the rule of law, and collaborative relationships. Given the unfavorable terms surrounding the Lomé partnership agreements, the Cotonou agreement was reached to promote and facilitate the ACP countries' economic, cultural, and social development. Specifically, enhance peace and security, political stability and democracy, and support for programs to reduce and possibly eradicate poverty in keeping with the sustainable development objectives (ActionAid Ghana, 2013) (Alavi, Gibbon, & Mortensen, 2007)⁶⁵.

⁶² Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d'Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 2.

⁶³ EU Commission, EU-Ghana Economic Partnership Agreement – Creating Opportunities for EU and African Businesses, 2020, p. 3. For an extensive explanation of the ECOWAS situation and the difficulties it faces, see Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, pp. 25-26.

⁶⁴ Between 1975 and 2000, the ACP countries received funds totaling €5.1 billion under STABEX. Under Lomé IV (7th EDF), STABEX distribution climbed to 16% of all EDF aid; in 1989, it accounted for 41% of all EDF disbursements. Support from STABEX was initially intended to come in the form of loans that were to be repaid into a revolving fund. However, abrupt drops in commodity prices led to a collapse in repayment rates. In response, the European Commission changed existing loans into grants in 1990. To cover eligible transfers in 1990–1992 and 1993, respectively, the European Commission was required to spend three times as much money than had been allocated for this purpose at the same time. STABEX payments drastically decreased under Lomé IV, from 14% in 1999 to barely 6% internationally. STABEX was replaced with the less flexible and more modest FLEX system, which makes up 1% of the 9th EDF's responsibilities, under the Cotonou Agreement.

⁶⁵ ActionAid Ghana. (2013). Ghana under interim economic partnership agreement. Analysis of socio-economic development and policy options under the interim EPA regime with the EU. Legon: JMK Consulting Ltd. https://ghana.actionaid.org/sites/ghana/files/actionaid_ghana_research_-_ghana_under_interim_epa_and_implication_for_socio-economic_development.pdf

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Contrary to the Lome Conventions, which are based on non-reciprocal trade, the Cotonou Agreement placed a higher priority on economic cooperation than on non-reciprocal trade preferences. In the new EU-Ghana EPA, the related sustainability development is centered on poverty reduction and enhancement of the economic and institutional environment since the agreement draws from the Cotonou agreement. However, the interim EPA only focuses on trade of goods and does not cover other areas of trade (Asante-Agyei, 2015)⁶⁶.

Regarding the inclusion of trade and sustainable development chapters, while others are either awaiting ratification or are being negotiated, the past decade has recorded several the trade agreements with TSD chapters. Table 1 provides a summary of trade agreements' typology, their commencement dates, country or region of implementation, and whether they include any TSD chapters. The Economic Partnership Agreement, more specifically, has enjoyed support and endured criticisms for several reasons. Supporters of the EPA cite its compliance with WTO rules, better tolerance for certain products, global reach, and its potential to attract foreign direct investment as key benefits. Conversely, opponents state that the EPA provides no incentives better governance and is unlikely to contribute to poverty reduction (see Table 2).

Alavi, A., Gibbon, P., & Mortensen, J. N. (2007). EU-ACP economic partnership agreement: Institutional and substantive issues. Copenhagen, 1-110. https://pure.diiis.dk/ws/files/61466/EU_ACP_Economic_Partnership_Agreement_EPAs_.pdf

⁶⁶ Asante-Agyei, O. (2015). Ghana-EU economic partnership agreement: An empirical analysis of trade creation and trade diversion. KDI School of Public Policy and Management, 1-48. <https://archives.kdischool.ac.kr/bitstream/11125/30643/1/Ghana-EU%20economic%20partnership%20agreements.pdf>

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Table 1: Trade agreement typology and sustainable development

Trade agreements' typology	Applied since	Country/region	TSD
Comprehensive Economic and Trade Agreement (CETA)	21 Sep 2017	Canada	include rules on TSD
Association Agreements-comprehensive trade agreement	1 Aug 2013	Colombia-Ecuador-Peru	include rules on TSD
Association Agreements	1 Oct 2013	Costa Rica-El Salvador-Guatemala-Honduras-Nicaragua-Panama	include rules on TSD
Economic Partnership Agreement	1 Feb 2019	Japan	include rules on TSD
FTA	21 Nov 2019	Singapore	include rules on TSD
FTA	1 Jul 2011	South Korea	include rules on TSD
FTA	1 Aug 2020	Vietnam	include rules on TSD
Deep and Comprehensive Free Trade Agreement Association Agreement		Ukraine	include rules on TSD
Association agreement	Re-negotiation	Chile	are awaiting ratification:
		China	are awaiting ratification
Economic Partnership, Political Coordination and Cooperation Agreement		Mexico	are awaiting ratification
Mercosur Association Agreement		Mercosur	Ongoing trade negotiations
Comprehensive Trade Agreement		Australia	Ongoing trade negotiations
Comprehensive Trade Agreement		New Zealand	Ongoing trade negotiations
FTA		Indonesia	Ongoing trade negotiations

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Table 2: On-going debate on EPA trade agreements

Proponent	Opponent
Supporters of the EPA systems pointed out that the trade agreement complies with WTO rules and will protect the parties from legal issues.	It is stated that the EPA terms need to be reviewed since it is unlikely that the connected benefits of reducing poverty and fostering institutional and economic growth would be realized.
In comparison to the Cotonou agreement regarding the rules of origin, the EPA is believed to have a level of tolerance for non-originating products that remains superior.	Critics contend that the trade preference associated with the EPA was unable to provide economic security as prices plummeted, inhibited innovation and diversity, and aided in the persistence of marginalization and vulnerability.
It is argued that EPA will aid in attracting foreign direct investment as ACP countries receive support through trade co-operation to meet international product standards.	EPA trade preference offered no incentives for better governance yet discriminate against non-ACP developing countries and did not comply with WTO rules.
The EPA provides ACP nations the opportunity to trade with the global economy according to their own conditions.	It is further argued that if the EU expanded its trading partners, the EPAs trade preference would diminish in five to ten years.
	Moreover, civil society organizations noted that adding new legally binding provisions to the EPA regarding government procurement, competition, and investment would further restrict Ghana's capacity to regulate important industries for the country's growth.
	Since no extra EPA development assistance has been provided under the EU's primary financial arm, critics doubt whether the EU's pledge of aid for trade will materialize.

2.3 Sustainability Impact Assessment (SIA)

As was the case in Vietnam, a Sustainability Impact Assessment was carried out for the whole ECOWAS region between 2004 and 2007, while the EU-ECOWAS EPA was under negotiation. Although some parts of the SIA study the situation in Ghana on particular issues, there was no SIA specific to Ghana.

Two reports (phase 1 reports) – one for the ACP in general and one for ECOWAS – identify relevant sectors and concerns to be examined by the SIA. Both underline that an emphasis on agriculture will be necessary, identify deforestation as an issue of environmental concern and cocoa as a priority commodity⁶⁷. According to the ACP phase 1 report, the SIA should pay particular attention to nine elements, including “activities that encourage extensive use of land and natural habitats or intensive agricultural production practices (including monoculture) and expanding areas of cultivation, particularly on marginal lands and pristine areas”⁶⁸.

As a result, a report on the Agro-industry in West-Africa was published the following year, but it unfortunately did not cover cocoa⁶⁹. It analysed potential sustainability impacts of the EPA on four sectors (fruits and vegetables, cereals, meat, and cotton), and concluded that for these products, agricultural production is expected to increase with the EPA, which will, in turn, could lead to increased pressure on land (land-use, agrochemicals, water, and soil quality)⁷⁰. However, it underlined that “[g]oods produced for the export market tend to be those that rely the most heavily on agrochemical inputs so increased opportunities for satisfying niche markets, leading to more sustainable production practices, could have positive impacts on land and water through decreased use of pesticides and fertilisers”⁷¹.

The report notably recommended the following measures in order to improve sustainability in the context of the EPA: improve information and training; provide technical assistance and education to assist the workforce to adapt to new requirements; focus on capacity building with the private sector (including agricultural producers) to promote sustainable development; improve information related to trade and sustainability; pursue cooperative regulatory dialogue on issues of common interest that can promote sustainability; and adopt domestic regulations that support sustainability⁷². In particular, the report underlined that “the consultations for this

⁶⁷ Qualified Preliminary EU-ACP SIA of the EPAs: Phase 1 (final report), 2004, p. iv, 42-50 and 117; SIA ECOWAS phase 1, pp. 39-45 and 92.

⁶⁸ Qualified Preliminary EU-ACP SIA of the EPAs: Phase 1 (final report), 2004, p. ix.

⁶⁹ Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, p. 12. For an economic analysis of the expected impacts of the EPA on the cocoa sector in Ghana, see Grumiller Jan, Raza Werner, Staritz Cornelia, Tröster Bernhard, von Arnim Rudi, The economic and social effects of the Economic Partnership Agreements on selected African Countries, OFSE Research Report 7/2018, 2018, pp. 89-104.

⁷⁰ Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, pp. 38-40

⁷¹ Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, p. 40.

⁷² Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, pp. 70-77.

SIA made it clear that many stakeholders lack basic information on the EPA. Capacity building for civil society (including industry) starts with improving understanding and information”⁷³.

In 2007, the Commission Services reacted to the SIA reports in a position paper, which underlined that sustainable development is already enshrined in the Cotonou Agreement and stated that “[d]evelopment cooperation should focus on capacity building to promote sustainable development in both the private and public sectors, with an emphasis on training, research and development, and a sound regulatory framework”. The Commission Services also supported the recommendation according to which economic, environmental and social sustainability issues should be covered within the EPA institutional framework ⁷⁴. However, despite these three mentions of sustainable development, the position paper mostly focuses on the economic aspects and impacts of the EPA.

2.4 EU-ECOWAS EPA and sustainable development

According to the Commission, “[t]he EPA’s main objective is to promote sustainable development and reduce poverty in Ghana”⁷⁵. However, as opposed to the EU-CARIFORUM EPA, which includes a whole Trade and sustainable development chapter, and despite the fact that the Commission Services’ paper announces its intention to include sustainable development measures within the EU-Ghana EPA, there is no specific provision on sustainable development in the text of the agreement.

Surprisingly, the term “sustainable development” is solely mentioned three times in the EU-Ghana EPA, in the Preamble of the agreement only. Even art. 1 does not include sustainable development or environmental protection in the goals of the EPA, which are of pure economic nature (market access, regional integration and economic cooperation, integration of Ghana in the world economy, compatibility with art. XXIV GATT 1994 etc.).

The only reference to the environment occurs in art. 68, which states that “[n]othing in this Agreement shall be construed to prevent the adoption or enforcement by the Parties of measures which are necessary to protect human, animal or plant life or health” (§b) or “relate to the conservation of exhaustible natural resources” (§f). The scope of this general exception clause is thus quite limited: the environment, instead of constituting an object deemed worth of protection, is only constructed as a justification ground not to comply with the agreement.

The EU-Vietnam EPA, on the other hand, aims to improve economic, trade, and investment dimensions in accordance with the objectives of sustainable development in its economic, social, and environmental dimensions. While encouraging investment under this Agreement,

⁷³ Sustainability Impact Assessment (SIA) of the EU-ACP Economic Partnership Agreements – West Africa: Agro-Industry, 2005, p. 71.

⁷⁴ EU Commission Services, Position Paper – Sustainability Impact Assessment of EU-ACP Economic Partnership Agreements, 2007, p. 8.

⁷⁵ EU Commission, EU-Ghana Economic Partnership Agreement, Creating Opportunities for EU and African Businesses, 2020, p. 3.

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high standards for labor and environmental protection remains a high priority, as well as pertinent standards and agreements that are internationally recognized⁷⁶.

The EU has always been a staunch supporter of Vietnam's economic and trade liberalization unlike Ghana. The EU gives enormous and beneficial opportunities for the development of the nation's trade in addition to providing considerable grants and low-interest loans to hasten Vietnam's reforms and global integration. Due to their close political relations and the Government of Vietnam's dedication to cooperation, the EU has been persuaded to offer Vietnam the best conditions for sustainable development. The EU has long granted numerous products having Vietnamese origin preferred status under the Generalized System of Preferences (GSP). As a result of the trade agreement, Vietnamese goods can now be imported duty-free or at a reduced price into the 28 EU Member States.

Despite these limited references to sustainable development, Bilal (2021) argues that since the iEPAs are based on the Cotonou Agreements, which themselves include the respect of human rights and sustainability principles, these are directly applicable in the context of the EPAs⁷⁷. Indeed, the Cotonou Agreement states that the central objectives of ACP-EU cooperation are poverty reduction and eradication, sustainable development, and progressive integration of the ACP countries into the world economy (Article 19). Zamfir (2020), however, underlines that the EPA with Ghana only reaffirms the commitments of the parties to the fundamental principles of the Cotonou Agreement in its preamble (§1), which is not in a binding provision, and that these principles are therefore not binding⁷⁸. Moreover, the Cotonou agreement has expired in 2020, and it is thus unclear whether the sustainability and human rights clauses have become ineffective⁷⁹.

The issue of development aid forming another facet of the agreement which is captured in Chapter II.8, all ACP nations, including Ghana, expressed discomfort with the EU's explicit absence of development aid from the formal discussions while also demanding extra resources for covering adjustment costs and increasing local supply capacity. Here, there are disagreements regarding the type and extent of help that will be provided in conjunction with EPAs, its delivery methods, and the way aid is connected to EPA implementation (Alavi, Gibbon, & Mortensen, 2007).

Langan & Price (2016) underline that in the context of the EU-Ghana EPA, sustainable development must in fact be understood in its economic, and to a lesser extent, its social

⁷⁶ European Union. (n.d.). *Guide to the EU-Vietnam free trade agreement*. Hanoi: The European Union to Vietnam. Retrieved from www.ecas.europa.eu/sites/default/files/eu_fta_guide_final.pdf

⁷⁷ Bilal San, EU-Africa trade relations and the EPA process: ratification and sustainable development perspectives for Cameroon, Côte d'Ivoire and Ghana, ECDPM discussion paper n° 304, 2021, p. 8.

⁷⁸ Zamfir Ionel, An Overview of the EU-ACP Countries economic partnership agreements – Building a new trade relationship, European Parliament Research Service, 2020, p. 7.

⁷⁹ Grumiller Jan, Raza Werner, Staritz Cornelia, Tröster Bernhard, von Arnim Rudi, The economic and social effects of the Economic Partnership Agreements on selected African Countries, OFSE Research Report 7/2018, 2018, p. 34.

conception. Indeed, tariffs and market access measures are mostly concerned with SDG 8 (wages and poverty reduction) and with protecting the national economy's competitiveness⁸⁰.

2.5 Another sustainability mechanism: the EU-Ghana Alliance on Sustainable Cocoa

Despite the lack of sustainability provisions in the EU-Ghana EPA, the EU and producing countries regularly discuss sustainable cocoa production in the context of the Economic Partnership Agreements⁸¹. In parallel to these, in 2020, the EU, Ghana, Ivory Coast and stakeholders involved on the cocoa value chain launched the Alliance on Sustainable Cocoa, which aims to enhance the sustainability of cocoa production and trade. This multistakeholder platform aims to outline its vision for future EU legislation affecting the cocoa sector, and to participate in implementing the trade and sustainable development aspects under the Economic Partnership Agreements⁸².

In 2021, eight virtual roundtables – “Cocoa Talks” – were organised on different topics: Living Income Differential; Standards; Traceability, Transparency and Accountability (including sub-groups on Child Labour and Deforestation); Regulations and Due Diligence; Development Cooperation and Finance; Sustainable Production Systems; EU Consumers and Sustainable Cocoa Products⁸³. This multistakeholder dialogue involved representatives of the EU, the industry and civil society organisations and representatives of Ghana and Côte d'Ivoire.

Based on these roundtables – whose main conclusions were presented in the summary conclusion report⁸⁴ – a roadmap was established in June 2022⁸⁵. It presented concrete actions and processes, deadlines and indicators to enhance the economic, social and environmental sustainability of the cocoa sector. Several actions were identified to fight deforestation by strengthening traceability, transparency and accountability: Create a national, government-mandated, sector-wide cocoa traceability system (Action 3B.1); Establish base-line forest and land use maps (Action 3B.2); Establish/reinforce and expand the coverage of deforestation monitoring systems and ‘early warning’ systems (including both satellite- and community-

⁸⁰ Langan Mark, Price Sophia, Oil and cocoa in the political economy of Ghana-EU relations: whiter sustainable development? Third World Thematics: A TWQ Journal, Vol. 1(4), 2016, p. 565.

⁸¹ Sustainable Cocoa Initiative, Factsheet, p. 1.

⁸² Sustainable Cocoa Initiative, Cocoa Talks, EU multi-stakeholder dialogue for sustainable cocoa, Concept Note, 2020, p. 2; EU Commission, DG Trade, EU, Côte d'Ivoire, Ghana and the cocoa sector endorse an Alliance on Sustainable Cocoa, 2022. Available at: https://policy.trade.ec.europa.eu/news/eu-cote-divoire-ghana-and-cocoa-sector-endorse-alliance-sustainable-cocoa-2022-06-28_en

⁸³ EU Commission, DG Trade, Sustainable Cocoa Initiative, Factsheet, 2022 p. 1. Available at: https://policy.trade.ec.europa.eu/news/eu-cote-divoire-ghana-and-cocoa-sector-endorse-alliance-sustainable-cocoa-2022-06-28_en

⁸⁴ Sustainable Cocoa Initiative, Cocoa Talks, EU Virtual Multi-Stakeholder Roundtables on Sustainable Cocoa – Conclusions from the first round of dialogue on sustainable cocoa, 2021.

⁸⁵ Sustainable Cocoa Initiative, Alliance for Sustainable Cocoa: for the economic, social and environmental sustainability of cocoa production and trade, Roadmap, 2022.

based systems) (Action 3B.3); Explore how data from deforestation monitoring systems can be fed into the national sector-wide cocoa traceability system (Action 3B.4).

Additionally, the following actions were presented to enhance sustainability in general in cocoa production: Scale-up agro-ecological solutions on already-used agricultural or barren land (notably agro-forestry) that combine local know-how with scientific research (Action 5.1), identify incentives that encourage the transition towards more sustainable production practices (e.g., payment for ecosystems services) (Action 5.2) and support farmer entrepreneurship through farmer aggregation and capacity-building for farmers' organizations as well as to crop diversification and the promotion of additional income-generating activities (Action 5.3).

Interestingly, the roadmap includes “[b]ilateral policy dialogue on sustainability issues in the EPA Committees (...). The dialogue on sustainability issues at the government-to-government level will take place as part of the EU-producing countries dialogue on development cooperation and in the framework of the Committees established under the Economic Partnership Agreements between the EU and Ghana, Côte d’Ivoire and Cameroon”⁸⁶.

To implement these measures, the EU contribution to the cocoa sector in Ghana will amount to at least €12 million until 2023, including through a programme supporting green transition⁸⁷.

2.6 Ghana’s Cocoa Value Chain and Sustainable Development

Cocoa contributes to the livelihoods and incomes of about 40 to 50 million people (mostly in developing countries) (Voora et al, 2019). With stable production from the rest of the world, dependence on cocoa from Côte d’Ivoire, Ghana, Cameroun, and Nigeria is at least 80%; increasing market share from 55% to 74% (Cocoa Barometer, 2020). Ghana’s agricultural sector contributes, on average, about 20.7% of the country’s GDP (SGER, 2022); and constitutes about 50% of all employment (Vigneri & Kolavalli, 2018). In 2021, cocoa’s share of agricultural exports was nearly USD 3 billion. Further, an estimated 800,00 to about a million households are directly or indirectly engaged in Ghana’s cocoa value chain, with income from cocoa sales accounting for about 61% of total household income among cocoa farming households (Bymolt et al., 2018).

Ghana’s cocoa value chain constitutes several actors whose activities fall under production, transportation, processing, and marketing. The main actors in Ghana’s cocoa value chain include input suppliers, farmers, Licensed Buying Companies (LBCs), hauliers (transporters), processing companies, the Ghana Cocoa Board (COCOBOD)⁸⁸, retailers, and consumers

⁸⁶ Sustainable Cocoa Initiative, Alliance for Sustainable Cocoa: for the economic, social and environmental sustainability of cocoa production and trade, Roadmap, 2022, p. 3.

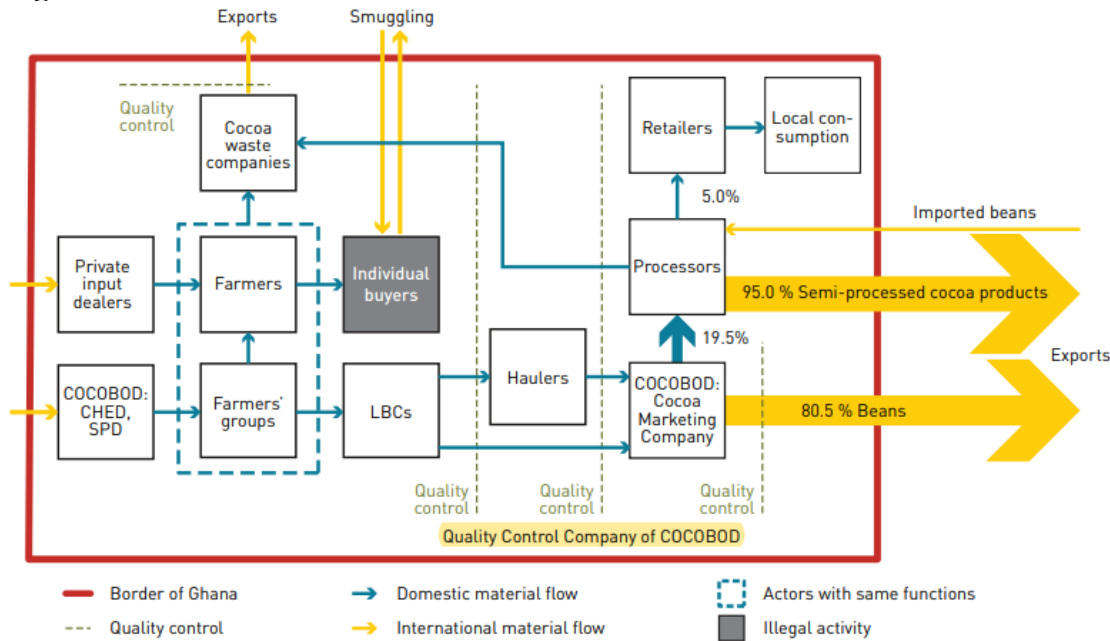
⁸⁷ EU Commission, DG Trade, EU, Côte d’Ivoire, Ghana and the cocoa sector endorse an Alliance on Sustainable Cocoa, 2022. Available at: https://policy.trade.ec.europa.eu/news/eu-cote-divoire-ghana-and-cocoa-sector-endorse-alliance-sustainable-cocoa-2022-06-28_en

⁸⁸ The Ghana Cocoa Board (COCOBOD) subsidiaries - Cocoa Health and Extension Division (CHED), Seed Production Division (SPD), and Cocoa Marketing Company (CMC) - are key actors in both pre-harvest and post-harvest related stages in the cocoa value chain.

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(Camargo & Nhantumbo, 2016). Other actors include COCOBOD’s research divisions (i.e., CHED, Cocoa Research Institute of Ghana, and the Quality Control Company), national and international research institutions, NGOs and farmer-related groups (Essegbey & Ofori-Gyamfi, 2012) financial companies, risk mitigation institutions (e.g. National Disaster Management Organization, Ghana National Fire Service and local volunteer groups), and other parastatal institutions (see Figure 1 and Table 3).

Figure 1: Ghana’s Cocoa Value Chain



Source: Monastyrnaya et al. (2016); Joerin et al. (2018)

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Table 3: Actors and their activities along Ghana’s cocoa value chain

Actor	Description
Ghana Cocoa Board (COCOBOD)	The Ghana Cocoa Board (COCOBOD), formerly Cocoa Marketing Board (CMB), was established in 1947 to oversee the purchase and export of all cocoa produced in Ghana (Darkwah & Verter, 2014). As the regulator, COCOBOD implements government’s policies and programmes in the cocoa sector (Essegbey & Ofori-Gyamfi, 2012) and oversees each step along the cocoa value chain. COCOBOD has five main subsidiaries through which its policies are implemented. These are the Quality Control Company (QCC), Cocoa Marketing Company (CMC), Cocoa Research Institute of Ghana (CRIG), the Cocoa Health and Extension Division (CHED) and the Seed Production Unit (SPU) (COCOBOD, 2017). ⁸⁹
Input dealers	Government through COCOBOD is responsible for the distribution of subsidized fertilizers, fungicides, and insecticides to cocoa farmers. All agrochemicals used in the cocoa sector in Ghana must be tested and approved by the Cocoa Research Institute of Ghana (CRIG), a subsidiary of COCOBOD. Inputs supplied include granular and liquid fertilizers, fungicides, and insecticides. The main input suppliers in the cocoa industry in Ghana include: Yara Ghana Limited, Wienco (Ghana) Limited, Golden Stork Ghana, Chemico Limited, Dizengoff (GH) Limited, Sidalco Limited, Calli Ghana Company Limited and Makhteshim Agan (African Cocoa Initiative, 2012). Yara Ghana Limited and Wienco (Ghana) Limited dominated the cocoa input market in Ghana (African Cocoa Initiative, 2012).
Farmers and Producer Organisations	There were about 800,000 smallholder farmers responsible for cultivating, harvesting, and drying of cocoa beans in Ghana (Ghana Statistical service, 2014). Cocoa production takes place in six out of the regions namely: Western, Ashanti, Brong-Ahafo, Central, Eastern and Volta regions (COCOBOD, 2012) ⁹⁰ . Production of cocoa beans is faced with challenges such as old cocoa trees and poor varieties and aged farmers (Waarts et al, 2013). In Ghana, only few cocoa farmers are organised into formal groups. A study conducted in 2010 revealed that only 15% of sampled farmers were members of a farmer association (Laven et al 2018). There are two prominent producer organizations in Ghana namely: Cocoa Abrabopa Association (CAA) and Kuapa Kokoo Farmers Union (KKFU).
Licensed Buying Companies (LBCs)	LBCs are private companies licensed by the Ghana Cocoa Board to engage in internal marketing of cocoa beans. Thus, LBCs buy cocoa beans from farmers at the village level through their district managers and purchasing clerks and transport the beans to the Cocoa Marketing Company (Monastyrnaya et al, 2016). LBCs have district offices (with district managers) in the cocoa growing areas where they operate. At the community level, LBCs are represented by Purchasing Clerks (PCs) who act as agents.
Processors	Local processors buy light crop cocoa beans from the Cocoa Marketing Company (CMC) at discounted prices and cocoa beans into products such liquor, butter, powder, and cake. According to the 2017 COCOBOD annual report, there were eight local processors for the 2016/2017 cocoa season; Cargill and Barry Callebaut Limited had market shares of about 28% and 23% respectively, accounting for 50.15% of domestic cocoa processed in 2016/17. Not more than 20% of the country’s cocoa beans is processed locally (Bangmarigu & Qineti, 2018).
Development partners and multinational organisations	Development partners and multinational organisations play several vital roles in Ghana’s cocoa sector. These roles range border broadly on addressing the sustainability issues of farmer poverty, child labour, and deforestation.

Source: Armah, R.N.A. (2021)

⁸⁹ These subsidiaries house monitoring and evaluation units which contribute to COCOBOD’s Research, Monitoring, and Evaluation (RM&E) activities.

⁹⁰ Considering the new regional administration, cocoa is produced in Western North, Western, Ashanti, Bono, Bono East, Ahafo, Central, Eastern and Volta Regions.

Link Between Ghana's Value Chain and Sustainable Development Goals

SDG 1-No Poverty, SDG2- Zero Hunger

The contribution of the cocoa industry to the Ghanaian economy is significant, employing approximately 850,000 farm families and generating more than \$2 billion annually through foreign exchange from export crops. Due to its significant impact on Ghanaian farmers' livelihoods, the cocoa industry has a strong potential to alleviate poverty and hunger (SDG 1&2)

SDG 7-Decent Work and Economic Growth, SDG 11-Sustainable Cities and Communities

Sector stakeholders are moving ahead with development plans that put renewed efforts into tackling sustainability challenges such as deforestation and child labour. Regulators and leading confectionery companies have led initiatives to tackle these issues through the implementation of sustainable production methods and anti-child labour programmes (SDG 8&11).

SDG 17-Partnerships to Achieve the Goals, SDG 16-Peace and Justice Strong Institutions, SDG 12- Responsible Consumption and Production

One mechanism for achieving these objectives is the Alliance on Sustainable Cocoa announced in June 2022 between the governments of Ghana, Côte d'Ivoire and the EU to take further steps to promote a more sustainable cocoa industry in West Africa. Aimed at halting deforestation (SDG-11) and child labour (SDG-7) whilst improving farmers' incomes (SDG-10 & 5), the alliance will also help producing countries and the cocoa sector prepare for the implementation of the EU sustainability legislation (SDG-9). Its members have committed to implementing traceability systems that will allow them to connect incidents of child labour to specific cocoa consignments and plots. To support the Alliance's objectives, the EU and the European Investment Bank will contribute some €12 million to Ghana up to 2023 for its work (SDG-17&16).

3. Qualitative Study Findings

A qualitative survey was conducted to assess the impact of EU-Ghana trade relations on sustainable development and deforestation. Out of the 18 identified key informants, we successfully interviewed ten. The stakeholders comprised four government institutions, two NGOs (one domestic and one international), two farmers' associations, and two development partner organisations.

The questions were designed in collaboration between participating universities, following the structure of the EU's trade and sustainable development policy action plan. While there were some common questions for all stakeholders, some stakeholder-specific ones were posed depending on expertise of the stakeholder in question. The interview guide sought respondents' knowledge of the EU-Ghana EPA. It asked if respondents could summarize, what in their view were, the main advantages and disadvantages of the EU-Ghana EPA. It further asked the stakeholders the extent to which they believe the EU-Ghana EPA could benefit Ghana's cocoa value chain. We also asked about the major environmental issue in the cocoa value chain and whether the agreement can address such. Further, we discussed respondents' familiarity with the Sustainability Impact Assessment of the EU-Ghana EPA and whether it includes all the key sustainability issues: particularly, environmental sustainability in Ghana. Also, what policies or regulations were adopted in Ghana to address sustainable development in the cocoa value chain. Additionally, we discussed the lack of sustainability provisions (Trade and Sustainability Development Chapter in the EU-Ghana EPA following the SIA conclusions.

3.1 Sustainable Development as a Key Focus

The survey reveals that stakeholders in Ghana perceive sustainable development as a crucial aspect of trade relations with the EU. The majority of the respondents, including government institutions, NGOs, and farmer unions, rated the importance of sustainability in the cocoa value chain as high. They acknowledged the growing demand for sustainable products in the EU market and emphasized the need for Ghanaian cocoa producers to align with these standards to access new market opportunities.

Sustainable development emerged as a central focus in the qualitative survey, with stakeholders in Ghana unanimously recognizing its significance in trade relations with the EU. Government officials, NGOs, and farmer unions, among others, emphasized the paramount importance of sustainability in the cocoa value chain. Most interviewees stressed that sustainable practices are no longer just optional but have become essential in accessing the EU market. They acknowledged the increasing demand from EU consumers for products that meet high sustainability standards, and they emphasized the need for Ghanaian cocoa producers to align with these requirements to tap into new market opportunities.

The interviewees highlighted that the EU's emphasis on sustainable development aligns well with the growing global consciousness about environmental and social impacts of trade and economic activities. Ghanaian stakeholders recognized that embracing sustainability in the

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cocoa value chain is not only crucial for accessing EU markets but also vital for the long-term viability of the sector and the overall economic growth of the country. They acknowledged that sustainable practices not only ensure environmental preservation but also lead to improved livelihoods for farmers, enhanced social welfare, and overall economic growth.

In recent years, the EU market has increasingly favored sustainably sourced products, making it imperative for Ghanaian cocoa producers to adopt sustainable practices to remain competitive. This shift in consumer preferences has created a clear economic incentive for Ghana to prioritize sustainability in its cocoa value chain. By aligning with EU sustainability standards, Ghana stands to benefit from increased market access, higher demand, and the potential for premium pricing for its sustainably produced cocoa.

Moreover, stakeholders recognized that sustainable development is not just about meeting the requirements of the EU market but also about fostering responsible and ethical cocoa production practices within the country. They highlighted the potential positive impact on local communities and the environment by encouraging sustainable practices, such as reforestation, fair labor practices, and reduced use of harmful chemicals.

Despite recognizing the importance of sustainable development, stakeholders also acknowledged that there are challenges in implementing sustainable practices throughout the cocoa value chain. Issues such as limited awareness and capacity among small-holder farmers, compliance with stringent environmental and labor standards, and the need for improved communication and cooperation mechanisms between Ghana and the EU were identified as potential hurdles.

Overall, the qualitative survey emphasizes the critical role of sustainable development in EU-Ghana trade relations, particularly in the cocoa sector. It underscores the growing significance of sustainability in accessing the EU market and its potential to bring about positive socioeconomic and environmental impacts within Ghana. However, it also highlights the importance of addressing challenges to ensure that sustainable practices are effectively adopted and integrated into the cocoa value chain for the benefit of all stakeholders involved.

3.2 Challenges in Implementing TSD Provisions

While sustainability is recognized as essential, the survey findings indicate that the EU-Ghana Trade and Sustainable Development (TSD) provisions alone might not be sufficient to drive significant changes in the cocoa value chain. Several challenges were identified:

The challenges identified in implementing the Trade and Sustainable Development (TSD) provisions between the EU and Ghana have shed light on critical areas that require attention to foster sustainable practices in the cocoa value chain.

One of the key challenges identified is the limited awareness and capacities among stakeholders, particularly small-holder cocoa farmers and local cooperatives. Many of them lack the necessary understanding and resources to comply with the EU's sustainability requirements. This knowledge gap poses a significant obstacle to adopting sustainable practices, as stakeholders may be unaware of the specific regulations and best practices that need to be followed. To address this, capacity-building and training programs have been

recommended as essential tools to empower cocoa farmers and local cooperatives with the knowledge and skills needed to adapt to the new sustainability standards effectively.

Another major challenge that emerged from the survey is the issue of compliance with high standards set by the EU. Ghanaian stakeholders expressed concerns about their ability to meet the stringent environmental and labor standards, which could potentially lead to losing access to the EU market. Compliance with such standards can be particularly challenging for small cocoa farmers, who may lack the necessary resources and infrastructure to meet the requirements. The fear of losing market access due to non-compliance poses a significant risk to their livelihoods and the sustainability of the cocoa industry in Ghana. Addressing this challenge will require finding ways to support cocoa farmers in meeting these high standards while ensuring that their efforts are economically viable.

The survey also indicated that despite the promotion of cooperation and dialogue in the EU-Ghana TSD chapter, the practical implementation of such mechanisms has been limited. Few stakeholders reported active involvement in cooperation mechanisms, which may hinder the effective exchange of information and best practices. Improving communication channels and enhancing collaboration between Ghanaian stakeholders and their EU counterparts is crucial to facilitate the sharing of knowledge, experiences, and expertise in sustainable cocoa production. This will allow for a more robust and coordinated approach to sustainability and drive meaningful changes in the cocoa value chain.

In conclusion, the challenges identified in implementing the TSD provisions between the EU and Ghana call for a comprehensive approach to address issues of limited awareness, compliance with high standards, and limited dialogue and cooperation. By investing in capacity-building, providing support to small cocoa farmers, and fostering active collaboration and communication, Ghana can overcome these challenges and make substantial progress in promoting sustainable development in the cocoa sector. Cooperation between the EU and Ghana, along with efforts from various stakeholders, will be crucial in driving positive change and ensuring the long-term sustainability of the cocoa value chain.

3.3 Complementary Role of Autonomous Instruments

Interviewees emphasized that the EU-Ghana TSD provisions should be seen as part of a broader framework, along with EU's unilateral instruments, to effectively promote sustainability in the cocoa value chain. While the TSD provisions provide a foundation for cooperation, stakeholders acknowledged the need for additional measures to address specific sustainability challenges:

Addressing Deforestation: Deforestation emerged as a significant concern in the cocoa sector, with interviewees stressing the need for specific regulations to combat illegal logging and promote sustainable forest management. Ghanaian stakeholders urged the EU to consider implementing the proposed Deforestation Regulation, which would help curb deforestation associated with cocoa production. This autonomous instrument could play a crucial role in ensuring that cocoa farmers adopt sustainable practices that preserve forest ecosystems, protect biodiversity, and mitigate climate change. By actively participating in the design and

implementation of this regulation, Ghana can contribute to the preservation of its natural resources and support sustainable cocoa production.

Corporate Sustainability Due Diligence: Interviewees recognized the potential of the proposed Corporate Sustainability Due Diligence Directive in improving sustainability practices in the private sector, particularly in the cocoa industry. This autonomous instrument aims to hold companies accountable for their environmental and social impacts, encouraging them to adopt responsible practices throughout their supply chains. Stakeholders expressed their support for this initiative and hoped for active involvement in its design and implementation. By engaging with the private sector and collaborating with companies involved in the cocoa value chain, Ghana can ensure that sustainable practices are upheld, and that social and environmental responsibilities are met.

Multi-Stakeholder Engagement: In addition to autonomous instruments, interviewees stressed the importance of multi-stakeholder engagement to address sustainability challenges effectively. They emphasized the need for collaboration between the EU, the Ghanaian government, cocoa farmers, certification agencies, NGOs, and private companies to jointly develop and implement sustainable solutions. Such engagements foster knowledge-sharing, facilitate the exchange of best practices, and enables coordinated efforts to achieve shared sustainability goals in the cocoa value chain.

Incentive Mechanisms: To encourage widespread adoption of sustainable practices, stakeholders proposed the development of incentive mechanisms. These incentives could take various forms, such as financial support, technical assistance, and market access opportunities. By providing tangible benefits to cocoa farmers and other stakeholders who embrace sustainable practices, incentive mechanisms can drive positive change and create a more sustainable cocoa industry.

In conclusion, the interviewees emphasized that the EU-Ghana TSD provisions are vital in promoting sustainability in the cocoa value chain. However, to effectively address specific challenges, autonomous instruments play a complementary role. Measures such as the proposed Deforestation Regulation and Corporate Sustainability Due Diligence Directive can contribute significantly to curbing deforestation, improving corporate practices, and fostering sustainability in the cocoa sector. Through multi-stakeholder engagement and the development of incentive mechanisms, Ghana can collaborate with the EU and other stakeholders to create a thriving and sustainable cocoa industry that benefits both the environment and local communities.

3.4 Leveraging TSD Mechanisms for Unilateral Legislation

The survey findings highlight the potential for leveraging the existing cooperation mechanisms of the EU-Ghana Trade and Sustainable Development (TSD) chapter to facilitate the implementation of the EU's unilateral legislation aimed at promoting sustainability in the cocoa value chain. By using these mechanisms effectively, stakeholders can collaborate, share knowledge, and work towards achieving shared sustainability goals.

Workshops: Workshops can serve as platforms for capacity-building and knowledge-sharing. Through workshops, relevant stakeholders, including cocoa farmers, local cooperatives,

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government officials, NGOs, and private companies, can gain a better understanding of the EU's unilateral legislation, such as the proposed Deforestation Regulation and Corporate Sustainability Due Diligence Directive. Experts and policymakers can provide insights into the requirements and expectations of these autonomous instruments. Workshops can also foster discussions on practical strategies to implement sustainable practices within the cocoa sector.

Trainings: Trainings are essential for equipping stakeholders with the skills and knowledge needed to comply with sustainability standards set by the EU's unilateral legislation. For example, cocoa farmers can receive training on sustainable agricultural practices, including environmentally friendly farming techniques and responsible use of agrochemicals. Training sessions can also address social aspects, such as labor rights and fair-trade practices. By empowering stakeholders with the necessary skills, training contributes to building a sustainable cocoa value chain that meets international standards.

Dialogues: Open and inclusive dialogues among stakeholders are crucial for fostering cooperation and understanding between the EU and Ghana. Dialogues provide opportunities for stakeholders to express their concerns, share experiences, and propose solutions collaboratively. Through these exchanges, the EU can better comprehend the specific challenges faced by Ghana in implementing the proposed unilateral legislation. Moreover, the Ghanaian stakeholders can voice their needs and seek support from the EU in overcoming obstacles to sustainability in the cocoa sector.

Knowledge Exchange: Leveraging the TSD mechanisms can facilitate the exchange of best practices and successful case studies from other regions or industries that have effectively implemented sustainability initiatives. This knowledge exchange can inspire innovative approaches and solutions within the cocoa value chain. It can also help identify potential areas for improvement and highlight successful strategies that can be replicated in Ghana.

Coordinated Efforts: By harnessing the TSD mechanisms, stakeholders can align their efforts towards common sustainability objectives. This coordination can enhance the impact of sustainability initiatives and ensure that resources are utilized efficiently. It also promotes accountability among all parties involved, fostering a sense of collective responsibility for sustainable development.

In conclusion, the survey findings underscore the potential for leveraging the existing cooperation mechanisms of the EU-Ghana TSD chapter to support the implementation of the EU's unilateral legislation, such as the proposed Deforestation Regulation and Corporate Sustainability Due Diligence Directive, in the cocoa value chain. Workshops, trainings, dialogues, and knowledge exchange are valuable tools for promoting sustainability and facilitating collaboration among stakeholders. Through coordinated efforts and mutual understanding, Ghana and the EU can work together to create a more sustainable cocoa value chain that benefits both the environment and the people involved in cocoa production.

3.5 Opportunities for Strengthening Cooperation

The qualitative survey identified several opportunities for strengthening cooperation between the EU and Ghana to achieve sustainable development goals in the cocoa value chain:

Ex-ante Consultation: One of the key opportunities for enhancing cooperation is through ex-ante consultation, which involves early involvement of stakeholders in the design and development of Trade and Sustainable Development (TSD) provisions and autonomous instruments. By engaging with cocoa farmers, local cooperatives, government officials, NGOs, and other relevant parties from the outset, policymakers can gain valuable insights into the local context and challenges. This participatory approach ensures that regulations are better-informed, considering the realities and concerns of those directly affected by sustainability measures. By considering local perspectives, the EU-Ghana cooperation can develop more effective and locally relevant strategies for sustainable development in the cocoa value chain.

Capacity Building: Capacity-building programs represent a significant opportunity for strengthening cooperation and promoting sustainability among small cocoa farmers and local cooperatives. Such programs can provide targeted training and education on sustainable farming practices, environmentally friendly techniques, and compliance with EU standards. By equipping stakeholders with the necessary knowledge and skills, capacity building enhances their ability to meet the stringent requirements set by the EU. It also improves their access to the EU market, creating new opportunities for Ghanaian cocoa producers. Furthermore, capacity-building initiatives can foster innovation and the adoption of sustainable technologies within the cocoa value chain.

Monitoring and Adaptation: Continuous dialogue and monitoring of the implementation progress are critical for identifying challenges and opportunities for improvement. Regular communication between the EU and Ghanaian stakeholders allows for timely adjustments and adaptations to changing circumstances. Through monitoring, policymakers can assess the effectiveness of sustainability measures and make evidence-based decisions. The EU and Ghana can jointly track progress towards achieving sustainable development goals in the cocoa value chain and collaboratively address any issues that may arise. This ongoing engagement fosters a sense of accountability and shared responsibility in the pursuit of sustainability.

4. Conclusion

The qualitative survey underscores the significance of sustainable development in EU-Ghana trade relations, with a specific focus on the cocoa value chain. While the Trade and Sustainable Development (TSD) provisions provide a solid foundation, it is essential to complement them with autonomous instruments to address the unique challenges faced by the cocoa sector. By leveraging existing cooperation mechanisms, such as ex-ante consultation, capacity-building programs, and continuous monitoring, the EU and Ghana can enhance their collaboration and jointly work towards achieving sustainable development goals. By aligning their efforts, sharing knowledge, and adapting to changing circumstances, the EU-Ghana cooperation can foster positive impacts and promote sustainability in the cocoa value chain, benefiting both the environment and the livelihoods of cocoa farmers and stakeholders involved.

Appendix

A. Interview questions

Questions for development partners

9. Can you briefly summarise main advantages and disadvantages of the EU-Ghana EPA?
10. Do you believe that the cocoa value chain benefits from the EU-Ghana EPA? If so, why, and to what extent?
11. Do you think that the EU-Ghana EPA sufficiently pays attention to important environmental problems in Ghana? If not, what is missing?
12. Do you think that the EU-Ghana EPA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the cocoa value chain?
13. What do you see as the major negative environmental issues resulting from the cocoa value chain in Ghana? Why and to what extent?
14. Are you familiar with the EU's Sustainability Impact Assessment of the EU-Ghana EPA? If so, do you think it includes all important problems of sustainability in general and environmental sustainability in Ghana? If not, what is missing?
15. Do you know why no sustainability provisions or Trade and Sustainable Development Chapter were included in the EU-Ghana EPA following the conclusions of the SIA?
16. In your opinion, which one most directly influences environmental sustainability in the cocoa value chain? (*Select only one*)
 - Private standards
 - Ghanaian environmental regulations
 - EU-Ghana Sustainable Cocoa Alliance
 - EU-Ghana EPA
 - EU environmental regulations
17. What policies or regulations were adopted in Ghana to address sustainable development in the cocoa value chain?
18. What are the impacts of these policies and regulations on your activities?
19. Were any specific social or environmental policies or regulations adopted in Ghana as a result of the EU-Ghana EPA? If so, what are they and how were they implemented?

Questions for institutional stakeholders

12. What are, in your opinion, the key benefits and priority sectors of the EU-Ghana EPA?
13. Do you believe that the cocoa value chain benefits from the EU-Ghana EPA? If so, why, and to what extent?
14. Are you familiar with the EU-Ghana EPA Sustainability Impact Assessment (SIA)? If so, did you find it helpful?

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15. Do you know why no sustainability provisions or Trade and Sustainable Development Chapter were included in the EU-Ghana EPA following the conclusions of the SIA?
16. Do you think that the EU-Ghana EPA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the cocoa value chain?
17. What do you see as the major negative environmental issues resulting from the cocoa value chain in Ghana? What can you tell us about the mining issue?
18. What projects, activities or trainings are organised by the EU to promote sustainability – and more specifically sustainable forests and cocoa value chains?
19. In your opinion, which one most directly influences environmental sustainability in the cocoa value chain? (*Select one*)
 - Private standards
 - Ghanaian environmental regulation
 - EU-Ghana Sustainable Cocoa Alliance
 - EU-Ghana EPA
 - EU environmental regulation
20. Are you involved in the EU-Ghana Sustainable Cocoa Alliance? Do you believe that it will deliver meaningful results in terms of sustainability in the cocoa value-chain?
21. What policies or regulations were adopted in Ghana to address sustainable development in the cocoa value chain?
22. Were any specific social or environmental policies or regulations adopted in Ghana as a result of the EU-Ghana EPA? If so, what are they and how were they implemented?

Questions for policy makers

23. Can you briefly summarise the main advantages and disadvantages of the EU-Ghana EPA in general?
24. Do you believe that the cocoa value chain benefits from the EU-Ghana EPA? If so, why, and to what extent?
25. Do you think that the EU-Ghana EPA sufficiently pays attention to important sustainability and environmental problems in Ghana? If not, what is missing?
26. Do you think that the EU-Ghana EPA can improve environmental sustainability? If so, how and to what extent? How about the environmental sustainability of the cocoa value chain?
27. What do you see as the major negative environmental issues resulting from the cocoa value chain in Ghana? Why and to what extent?
28. Are you involved in or/and have your organised any projects, activities or trainings to promote sustainable forests and cocoa value chains as a result of the EU-Ghana EPA? If so, have resources been made available, and who provided them?
29. Are you familiar with the EU's EU-Ghana EPA Sustainability Impact Assessment (SIA)? If so, did you find it helpful?

30. Do you know why no sustainability provisions or Trade and Sustainable Development Chapter were included in the EU-Ghana EPA following the conclusions of the SIA?
31. In your opinion, which one most directly influences environmental sustainability in the cocoa value chain? (*Select one*)
- Private standards EU-Ghana EPA
- Ghanaian environmental regulation EU environmental regulation
- EU-Ghana Sustainable Cocoa Alliance
32. What policies or regulations were adopted in Ghana to address sustainable development in the cocoa value chain?
33. What are the impacts of these policies and regulations on your activities?
34. Were any specific social or environmental policies or regulations adopted in Ghana as a result of the EU-Ghana EPA? If so, what are they and how were they implemented?

B. Other trade agreement provisions and SDG linkages: lessons learned

B.1 Labour Provisions

Labour provisions in trade agreements recognise the importance of labour standards to promote sustainable development and globalisation and to create widespread social benefits. In terms of substantive standards, all agreements involve parties making commitments in relation to the International Labour Organisation’s (ILO) Core Labour Standards which comprise: freedom of association and the effective recognition of collective bargaining, the elimination of forced and compulsory labour, the abolition of child labour (consistent with SDG-8, decent work and economic growth), and the elimination of discrimination in respect of employment and occupation (in line with SDG-10, reduced inequality).

Th commitments to substantive standards are accompanied by a range of procedural commitments, including dialogue and cooperation through the following institutional structures; transparency when introducing new labour standard measures domestically; monitoring and review of how the agreement affects sustainability; a commitment to uphold levels of domestic protection in relation to labour rights (SDG-12, Responsible Consumption and Production); a commitment not to use labour standards for the purposes of disguised protectionism and to uphold existing domestic labour laws(SDG 10, Peace and Justice strong institutions); and a commitment not to weaken or waive laws to encourage trade or investment (consistent with SDG 16, Peace and Justice strong institutions).

In Ghana, the Labour Act 2003 (Act, 651) consolidates and updates the various pieces of former legislation and introduces provisions to reflect ratified ILO Conventions. The Labour Act covers all employers and employees. Major provisions of the Labour Act include the establishment of public and private employment centres, protection of the employment relationship (SDG-10), general conditions of employment, employment of persons with disabilities, employment of young persons (SDG-8), employment of women, fair and unfair

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termination of employment (SDG-5, Gender equality), protection of remuneration, temporary and casual employees, unions, employers' organisations and collective agreements, strikes, the establishment of a National Tripartite Committee, forced labour, occupational health and safety, labour inspection and the establishment of the National Labour Commission.⁶

Ghana joined the International Labour Organisation in 1957 and the government ratified many of the ILO Conventions including the 'core' Conventions that guarantee workers the right and freedom to form or join unions, the right to collective bargaining, abolition of forced labour (SDG-8), and equal treatment (SDG-5). Many other ILO Conventions that sought to promote industrial harmony and the welfare of workers were also ratified. These included Conventions on hours of work in industry, weekly rest, minimum wage fixing, labour inspection, underground work by women, employment service, night work by women, social policy, working environment, child labour, labour administration, and many others (consistent with SDG-8, Decent Work and Economic growth).

Specifically, the Labour Act 2003, spells out the Contract of employment (written contract of employment for work done for a period of 6 months or for a number of bargaining days equivalent to 6 months or more within a year), Hours of work (A maximum is set at 8 hours a day or 40 hours a week, except in cases expressly noted in the Act), Leaves (annual leave with pay ie.15 working days in every calendar year of continuous service, deemed to mean not less than 200 days in the particular year), Equality (which prohibit discrimination on the basis of race, sex, ethnic origin, creed, colour, religion, social, or economic status), Maternity (at least 12 weeks, with extensions in certain circumstances), Minimum age and protection of young workers (minimum legal age of entering the labour market is 16 years), Remuneration (which include the basic or minimum wage or salary and any additional allowances payable directly or indirectly by the employer to the worker), Trade unions and employer' organisations, Collective bargaining and dispute settlement, strikes and lockouts. These labour provisions in Ghana relate to the immediate needs of workers and promote the respect of labour rights, which is consistent with the fundamental conventions of the ILO and directly and indirectly linked to SDGs (1, 2, 5, 8, 10, 16 & 17)

B.2 Environmental Provisions

One main component of the 2030 Agenda for sustainable development and sustainable development goals is environmental protection⁹¹. Thus, protecting the planet from degradation (SDG-13). A frantic effort is needed to reduce environmental degradation through sustainable production and consumption and sustainable resource management (SDG-13, 14, and 15 i.e., climate action, life below water and life below land). The urgency of this is evident in the rate of climate change and specifically global warming. Most World Trade Organization Agreements require that trade policies reflect some level of environmental concerns.

The North American Free Trade Agreement was the first RTA to comprise an environmental provision. The agreement includes an environmental provision which is legally binding. The Trans-Pacific Partnership (TPP) also allocates a chapter to the environment. The environmental provisions in the TPP cover trade in wildlife, environmental goods and services, biodiversity,

⁹¹ <https://sdgs.un.org/2030agenda> Accessed: 20/01/2023

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the reduction of emissions as well as subsidies in fisheries. According to the OECD Joint Working Party on Trade and Environment (JWPTE), four main policy drivers responsible for the inclusion of an environmental provision in RTAs include: to promote sustainable development (SDG 17), to ensure that members interact from a level playing field (SDG 5 and 10), to ensure cooperation and the pursuit of environmental goals (SDG 7, 10 and 12).

International institutions do have a role in ensuring that countries achieve sustainable development. International institutions such as the World Bank enforce compliance among parties in an agreement by making compliance a prerequisite for accessing funds (SDG 16). For instance, Ghana had to comply with the World Bank Group General Health and Safety Guidelines and World Bank Environmental and Social Standards 1 to 10 in order to access funds for the Food System Resilience Program Phase 2.⁹²

Ghana's Environmental Law has been influenced by Ghana's participation in several treaty arrangements aimed at addressing contemporary international challenges such as climate change (SDG-13), marine pollution (SDG-14) and conservation of biodiversity (SDG-15). The Ghana Environmental Protection Agency 1994, Act 490 orders the Environmental Protection Agency (EPA) to regulate and implement government environmental laws and policies in Ghana. Act 490 further mandates the EPA to make improvements while preserving and providing solutions to the environmental issues of Ghana.

The EPA Act 490 along with Environmental Assessment Regulations (1999), additionally sets up the Environmental Assessment Systems (EAS) in Ghana ordering them to Screen, Register, direct Environmental Impact Assessment (EIA) and Environmental Management Planning (EMP). Some of the environmental laws and policies include Environmental Sanitation Policy (SDG-15), Environmental Protection Agency Guideline, National Irrigation Policy (SDG 14), Growth and Poverty Reduction Strategy (SDG-1&2), National Action Program to Combat Drought and Desertification (SDG-13), National Land Policy (SDG-15), National Water Policy (SDG 14) and National Wildlife Policy (SDG-11).

In addition, the Health Sector-Specific Environmental Impact Assessment (EIA) guidelines have been enacted to ensure the sustainable development of the health sector and contribute towards sound environmental management in the health sector. The ultimate aim of the national environmental policy of Ghana is to improve the surroundings, living conditions and quality of life of all citizens both present and future (SDG-3, Good health and wellbeing). It seeks to ensure reconciliation between economic development and natural resource conservation, to make high quality environment a key element supporting the country's economic and social development. In this respect, considerable attention has been given to the use of Environmental Impact Assessment (EIA) to help promote sustainable development in Ghana (SDG-17).

⁹² Ministry of Food and Agriculture, Food System Resilience Program Phase 2. Accessed: 20/01/2023

TRADE4SD

Fostering the positive linkages between trade and sustainable development

Programme: H2020-EU.3.2.1.3. - Empowerment of rural areas, support to policies and rural innovation

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on the sustainability of the Tunisian Olive Oil Value Chain

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Effect of EU bilateral trade agreement on the sustainability of the Tunisian Olive Oil Value Chain

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Acronyms

AA	Association Agreement
CA	Cooperation Agreement
CBD	Convention on Biological Diversity
CGE	Computable General Equilibrium
CITIES	Convention on International Trade in Endangered Species
CSR	Corporate Social Responsibility
DCFTA	Deep and Comprehensive Free Trade Area
EU	European Union
FDI	Foreign Direct Investment
FLI	Food Loss Index
FTAs	Free Trade Agreements
GDP	Gross Domestic Product
GVC	Global Value Chain
ILO	International Labour Organisation
IOC	International Olive Council
IPT	Inward Processing Traffic
LCA	Life Cycle Assessment
MEAs	Multilateral Environmental Agreements
MENA	Middle East and North Africa
MFN	Most-Favoured-Nation
NGO	Non Governmental Organization
NOx	Nitrogen Oxides
NTMs	Non-Tariff Measures
ONH	National Office of Oils

PCA	Principal Component Analysis
PM	Particulate Matter
SDG	Sustainable Development Goals
SIA	Sustainability Impact Assessment
Sox	Sulphur Dioxide
SPS	Sanitary and Phytosanitary Standards
TBT	Technical Barriers to Trade
TSD	Trade and Sustainable Development
TSIA	Trade Sustainability Impact Assessment
UNFCCC	UN Framework Convention on Climate Change
VOO	Virgin Olive Oil

1. Introduction

Since 2015, the European Union (EU) and Tunisia have been negotiating a Deep and Comprehensive Free Trade Area (DCFTA) to replace their 1998 Association Agreement (AA). After the 1976 Cooperation Agreement (CA), the EU and Tunisia signed an AA in June 1995, which served as a reference in negotiations with other countries in the EU's Southern Neighbourhood: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia (Ghesquiere, 2001). The AA provides for a far-reaching liberalization of trade, in particular of industrial goods, the harmonization of the regulatory framework, with the aim to phasing out any practices that distort trade between the partners, and an enhanced financial and economic cooperation (Jbili and Enders, 1996).

The AA dismantled all tariffs and quotas on industrial goods (a liberalization process started with the CA) and took a further step towards agricultural trade liberalization. However, this process remained limited and tariff protection or quotas still exist only in the agricultural sector (Grumiller et al., 2018a). Although the AA was signed on 17 July 1995 and its ratification was in March 1998, Tunisia decided to begin applying it as of January 1996. Since then, there have been continuous negotiations about liberalising agricultural trade, seeking greater and reciprocal market access. To date, only certain products (dates and spices) benefit from duty-free access, while others, such as olive oil, are subject to preferential access with tariff rate quotas. Those negotiations stopped with the political upheavals in 2010 and were only resumed in 2015 with the proposed new DCFTA (Rudloff and Werenfels, 2018).

The envisaged DCFTA aim to further liberalise the agricultural sector, and other sectors, such as investment and services, and to remove customs barriers and harmonise standards between the EU and Tunisia. Overall, the DCFTA is intended to create new trade and investment opportunities to better integrate the Tunisian economy into the EU market and support the economic reforms underway in Tunisia (DG AGRI).

Tunisia's agriculture faces several economic, social, and environmental challenges. Agriculture is responsible for 10% of the Tunisian GDP, but it also plays a double role: securing food supply for the population and being a factor for population satisfaction with the political system (Rudloff, 2020). In the past, Tunisia has experienced violent demonstrations against rising food prices (e.g., bread). This gives the agricultural sector of great economic and social relevance, with prompt socially stabilizing effects. At the same time, only half of Tunisia's land is suitable for agriculture. This increases the pressure on natural resources such as soil and water due to climate changes effects: regions like the North-West are especially affected. Moreover, the agricultural sector provides employment opportunities for young people in rural

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areas: it accounts for 22% of all jobs where over 50% of the young people employed are day labourers without any labour contract (Rudloff, 2020).

Despite the assurances given by both the the Tunisian Government and the European Commission highlighting the opportunities that the draft agreement would bring to the Tunisian economy, it has nevertheless been at the heart of a controversy in various official and civil society forums since its announcement. The apprehensions that it raises generally relate to its direct and indirect impacts on the Tunisian economy and society (Rudloff, 2020).

This report explores the linkages between Tunisia's economy and the Sustainable Development Goals (SDGs), particularly with reference to the olive oil sector. Table 1 provides an overview of several key SDGs and the associated targets and indicators that have been considered in the analysis.

Table 1- The link between Tunisia's economy and the SDGs considered in the report

SDG	Definition	Target/Indicator/Related goals	Impact on olive oil value chain from interviews and secondary data
SDG1	End poverty in all its forms everywhere	1.5.2 Direct economic loss attributed to disasters about global gross domestic product (GDP)	3 years of droughts reduced the olive oil production volume
SDG2	Zero hunger	2.1.1 Prevalence of undernourishment	Less availability of olive oil in the domestic market replaced by imported grain oil
		2.3.2. Average income of small-scale food producers, by sex and indigenous status	Small olive producers do not access the profitable export market
		2.c.1 Indicator of food price anomalies	Olive oil in the local market is too expensive. For local retailers, the price follows international market prices provided par IOC
		Rural population	22% of the population live in rural area
		Producer Price Index	Great volatility of international prices (IOC) due to main fluctuations of the production impacted by the weather

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SDG5	Achieve gender equality and empower all women and girls	5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex	Olive production employs many women and procures revenue, but the salary is low compared to men's employment in the olive oil industry
SDG6	Ensure availability and sustainable management of water and sanitation for all	6.4.1 Change in water-use efficiency over time	The main problem is the availability of water for irrigation of olive trees
SDG7	Ensure access to affordable, reliable, sustainable and modern energy for all	7.2.1 Renewable energy share in the total final energy consumption	Tunisia initiated an ambitious National Water Program that was scheduled for completion in 2050. This program encompassed desalination plants powered by solar energy, dam construction, water reservoirs, and urban water collection
SDG8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.1.1 Annual growth rate of real GDP per capita	15% and 10% GDP
		8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	The government gives subsidies for imported oil (180000 t/year)
		8.a.1 Aid for Trade commitments and disbursements	Spanish and Italian producers invest in the olive oil sector
SDG10	Reduce inequality within and among countries	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	30% of total expenditure on food Consumption of seed oil (260 L/year) and only 20 to 30 L/year of olive oil.
		Purchasing power-adjusted GDP per capita	3500 USD/capita/year
SDG12	Ensure sustainable consumption and production patterns	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Efforts on water use in olive oil production. Investment in desalination of seawater, regulation of new water wells

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		12.3.1 Food Loss Index (FLI)	The Food Loss Index (FLI) focuses on food losses that occur from production up to (and not including) the retail level. It measures the changes in percentage losses for a basket of 10 main commodities by country in comparison with a base period.
		12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, by agreed international frameworks, and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment	Many private initiatives supported by public advisers help producers use pomace and margins as fertilisers with caution, some producers transform margins into wood.
SDG13	Take urgent action to combat climate change and its impacts	13.2.2 Total greenhouse gas emissions per year	extensive rainfed has a value of 3.14 kg CO ₂ eq. per kg of Virgin olive oil
SDG17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	17.7.1 Total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies	Productive varieties come from Spain. New irrigating technologies to save water (grounded irrigation)
		17.11.1 Developing countries and least developed countries' share of global exports	EU trade agreement allows exporting 56,700 tons of virgin other than lampante olive oil free of taxes
		Trade balance	-15,8% in March 2023
		Total exports by country	600 million € (2,000 million Tunisian Dinars)
		Pesticides trade	1,45Kg/ha/year (2 million hectares)
		Trade tariff	Free trade for 56,700t into Europe, then a tariff of Euro 1.245 per kg

Note: A more extensive number of SDGs and targets/indicators have been considered in this report compared to the recent study conducted by Jouili, M. (2023). This is mainly because this analysis does not only focus on the olive oil value chain but also includes other economic sectors and their related linkages with the SDGs.

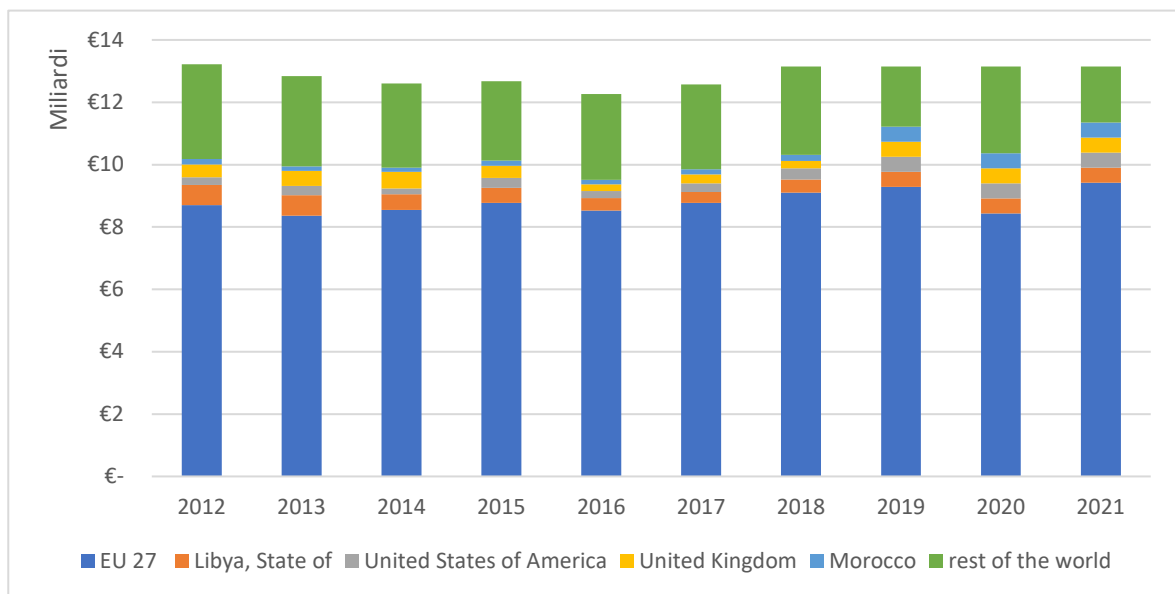
As following, Section 1 analyzes the EU and Tunisia trade relationship and arrangements. Section 2 provides the results of the sustainability impact assessment. Section 3 reports a literature review on the impact of the DCFTA. Other trade agreements provisions and SDG linkages are included in section 4. Section 5 provides a description of the Tunisian olive oil value chain and the link with sustainable development. Section 6 includes a survey on stakeholder's view. In Section 7 conclusions are reported.

2. Desk analysis

2.1 Olive oil bilateral trade

The EU and Tunisia have a deep-rooted history of trade relations where the trading patterns are unbalanced. The EU is the most important trading partner for Tunisia, accounting for 56% of the Tunisian trade in 2022: 70% of Tunisian exports went to the EU and 46% of Tunisian imports came from the EU. In the last decade, the export value from Tunisia to the EU went from €8.7 to €9.4 billion, increasing by 3% (Figure 1).

Figure 2- Tunisia's export value to the world (unit: euro billion)



Source: own elaboration on ICT data

At the same time, Tunisia represented 0.5% of the EU's total trade with the world in 2022. Moreover, the EU is the biggest foreign investor in Tunisia: 85% of the Foreign Direct Investment (FDI) stock in the country (DG Trade).⁹³

⁹³ https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/tunisia_en, data downloaded on September 27, 2023 h. 18:34.

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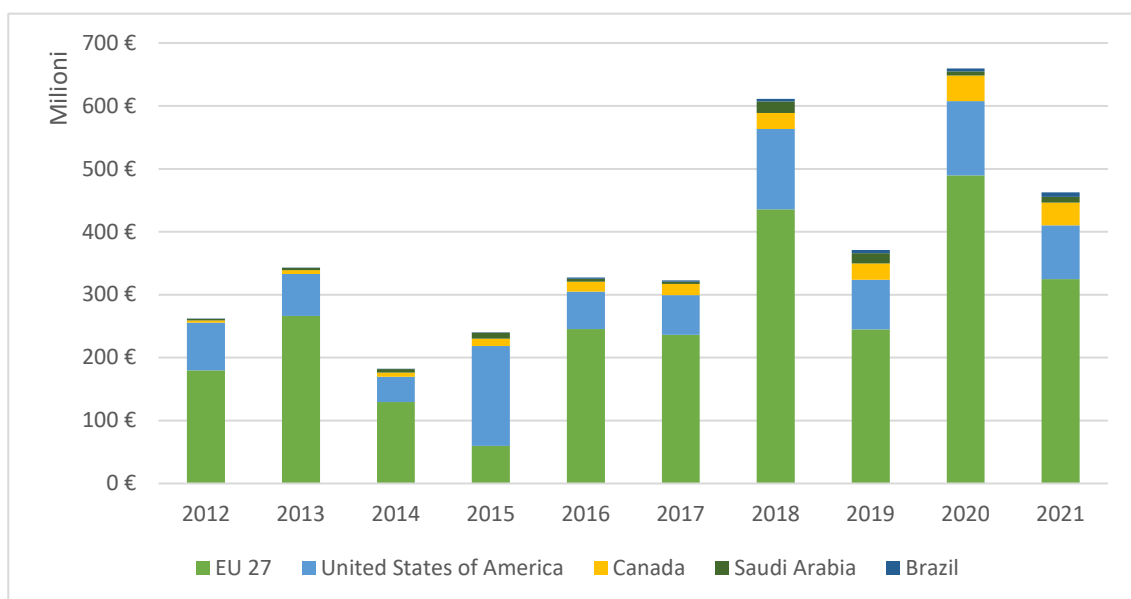
Up to the Arab Spring in 2011, Tunisia experienced stable economic growth, which translated into improvements in the competitiveness of the Tunisian economy. After that, economic performance worsened, particularly with the COVID-19 crisis in 2020 (Raza et al., 2022).

Olive oil, regarded as a “sensitive” Mediterranean product by the European Commission, stands out as a prime example of intensive trade interactions between the EU and Tunisia (European Commission, 1997).

In the 2021/2022 crop year eight markets covered around 80% of the world's imports of olive oils and virgin olive oils: with the US being the first one with an import share of 35%, followed by the EU with 15% (International Olive Council, 2022). The EU is the largest producer, exporter, and consumer of olive oil in the world. It supplies around 67% of the world’s olive oil with four countries (Spain, Greece, Italy, and Portugal) that essentially cover the whole production (European Commission, 2023). The trade relationship in olive oil between the EU and Tunisia shows an imbalance that mirrors the broader trade dynamic. Despite Tunisia's long-standing role as a supplier, it does not rank among the primary source: while over 80% of the EU’s imports from third countries come from Tunisia, it is equivalent to olive oil quantity produced in Portugal, constituting roughly 9% of the EU's domestic production (European Commission, 2023).

On the other hand, the EU has been by far the largest olive oil importer from Tunisia in the last decade: export value increased significantly during this period going from €180 million to €324 million but the quota on total export value has remained mostly stable over time with a slight increase of 3% from 2012 to 2021 (Figure 2).

Figure 3- Tunisia's export value of olive oil (million EUR)



Source: own elaboration on ICT data

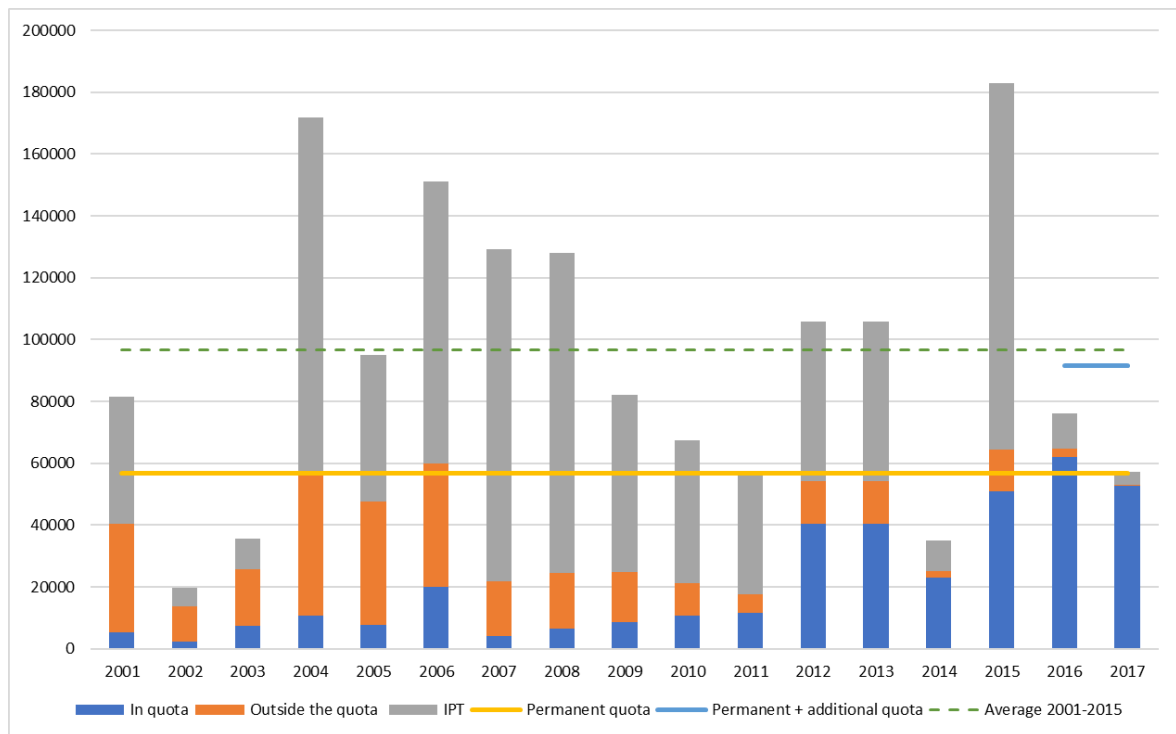
Olive oil exports play a crucial role in Tunisia's trade balance. Over the last decade, Tunisia exported on average 168,000 tons of olive oil, which constituted over 80% of the nation's total olive oil production, contributing to nearly 40% of the primary sector's export revenue. (Jouili, 2023).

Olive oil benefits of concessions under the AA, for which the EU-Tunisia agreement establishes in Article 3 of Protocol No. 1 an annual duty-free quota for the first 56,700 tons of virgin other than lampante olive oil arriving in the EU. After that, a tariff of €1.245 per kg applies (CBI 2022)⁹⁴. Only oil produced entirely in Tunisia and from olives grown locally benefits from preferential tariffs. This means that Tunisia cannot import Libyan or Algerian olive oil to reexport to the EU.

After the 2015 terrorist attacks, the EU introduced emergency autonomous trade measures, providing for an additional annual zero-duty tariff quota of 35,000 tons for each of the years 2016 and 2017, provided that the annual quota of 56,700 tons has previously been fully allocated. In 2016 only 30% of the additional quota was allocated (approximately 10,400 tons), in 2017 the temporary quota was not allocated at all. It's worth saying that the allocation of quotas does not necessarily correspond to actual imports. Indeed, in 2016 only 2,557 tons were actually imported under the additional quota, that is 7.3% of 35,000 tons, and 0% in 2017 (Ben Rouine, 2018). In the two years, the total imports of virgin olive oil from Tunisia - taking into account imports under quotas, those subject to the payment of the duty (outside the quota), and those which occurred in Inward Processing Traffic (IPT) - stood at only 76,000 tons and 57,300 tons, respectively, a quantity significantly lower than the average imports of the previous 15 years (96,000 tons, period 2001-2015) (Figure 3). Therefore, the presence of the additional quota did not increase EU imports, as these are influenced by other factors, such as the level of domestic production, both in the EU and in Tunisia (which affects imported volumes) and relative prices (which affect the choice of customs regime utilized) (CREA, 2019). Both IPT and quota system affect the EU imports of bottled olive oil that generate higher value-added. IPT concerns only olive oil in bulk, by which the Tunisian origin is lost. Although the quota system allowed the import of bottled olive oil, EU importers often prefer bulk olive oil to add value through bottling and branding (Grumiller et al. 2018a; Raza et al., 2022).

⁹⁴ <https://www.cbi.eu/market-information/processed-fruit-vegetables-edible-nuts/olive-oil/market-entry>

Figure 4- EU imports of virgin olive oil from Tunisia from 2001 to 2017 (tons)



Source: CREA, 2019

Other EU legal provisions apply in addition to the agreement, including contamination⁹⁵ criteria (pesticide residue, microbiological contaminant, and other chemical substances).

Table 2 lists the texts mentioned. Regulations are essential because they have a direct effect and take precedence over the national rights of EU member states (Boutayeb 2020).

Table 2- Non-exhaustive list of applicable standards and required for a Tunisian olive oil exporter

Regulation's name	Target	Number
EU-Tunisia Agreement (Euro-Mediterranean) (1998)	Tarif	L 97/2
Commission Regulation (19/12/2006)	Contaminants	(EC) 1881/2006

⁹⁵ Commission Regulation (EC) No 1881/2006 of December 19, 2006, setting maximum levels for certain contaminants in foodstuffs. <http://data.europa.eu/eli/reg/2006/1881/2021-09-19>

Commission Delegated Regulation (18/05/2016), Commission Implementing Regulation (18/05/2016)	AGRIM (authorization to import)	(EU) 2016/1237, (EU) 2016/1237
Commission Delegated Regulation (29/07/2022)	Oil origin	(EU) 2022/2104

Source: own elaboration

2.2 Export channels

As outlined in the previously, there are three export channels through which olive oil can enter EU market: within a tariff quota, IPT and in compliance with most-favoured-nation (MFN) tariff. Notably, there are no distinct customs regulations for organic olive oil or bottled olive oil. Both types follow the same export channels, which are described below:

Tariff quota: Tunisian olive oil exports to the EU are governed by a preferential tariff quota with a zero-duty rate (Grumiller et al., 2018b). Since 2006, there has been an annual permanent duty-free tariff quota of 56,700 tons of virgin other than lampante olive oil imported in the EU market. Significant changes in the allocation of EU import licenses have occurred under the guidance of EU Regulation 2016/1237. Formerly, import licenses, known as AGRIMs, were issued monthly. As of 2016, they are allocated on an annual basis with the aim of reducing administrative costs. At the beginning of each year, importers submit applications to the EU for AGRIMs, in which they specify the quantity of olive oil they plan to import for the entire upcoming year: if the total annual import volume of 56,700 tons is not met, each importer is granted the number of AGRIMs they initially requested. In cases where the cumulative requested volume of AGRIMs surpasses the 56,700 tons quota, each importer receives a pro-rata allocation based on the number of requests made (Grumiller et al., 2018b). The shift from issuing licenses monthly to an annually has contributed to alleviate the planning uncertainty for Tunisian exporters (Grumiller et al., 2018a).

IPT: In the inward processing arrangements, Tunisian olive oil is used as a cost-effective additive to increase the volume of bulk goods in European olive oil. Despite the label indicating the presence of non-UE olive oil, the Tunisian origin is not reported on the label. On average, approximately 30% of all Tunisian olive oil exports enter the EU market through IPT arrangements (GIZ, 2019). The total annual quantity of Tunisia's exports, therefore, is divided between two main channels: the tariff quota and IPT.

MFN tariff: Olive oil exports to the EU that fall outside the established quota or the IPT are subject to third-country tariff ranging from 31% to 32% depending on olive oil quality (Grumiller et al., 2018a; GIZ, 2019). This export channel in the last years is rarely utilized because IPT, which has no restrictions, is the preferred alternative (GIZ, 2019).

There are approximately 80 exporting companies in Tunisia, with 50 of them specializing in the export of bottled and branded olive oil. Overall, three dominant players - CHO (Tunisian), Borges (Spanish), and Sovena (Portuguese) - stand out as key contributors to Tunisia's olive oil exports (Grumiller et al., 2018a). These larger exporting companies tend to operate with vertical integration throughout the entire production chain, which includes olive cultivation, milling and bottling facilities. They also buy olive oil from mills and market it either in bulk or as branded bottled olive oil to international buyers. The bottles used for packaging are primarily manufactured domestically by the Tunisian company Sotuver but are also imported from overseas, particularly Italy, to accommodate various varieties and quality standards (Grumiller et al., 2018a).

The EU olive oil market poses significant challenges for Tunisian exporting companies. The challenges include i) a limited percentage of value-added product exports, as olive oil is typically traded in bulk; ii) olive oil production is unpredictable due to climate change and water scarcity. iii) elevated financing costs, such as access to credit; iv) high packaging expenses, primarily driven by reliance on imported bottles; Tunisian olive oil is not widely recognized because of the common practice of importers to blend and rebrand it (Grumiller et al., 2018b).

2.3 Deep and Comprehensive Free Trade Agreement (DCFTA) still in discussion

Negotiations for a Deep and Comprehensive Free Trade Area (DCFTA) between the EU and Tunisia were launched in Tunis on 13 October 2015. The first round of negotiations was held in Tunis from April 18 to 21, 2016. The fundamental principles to which the negotiations will have to refer are (Raza et al., 2022):

- 1) asymmetry of liberalisation, to consider the difference in the level of development between the two parties and to design commitments commensurate to the level of development of each party;
- 2) liberalization should be progressive and accompanied by the necessary support to strengthen the competitiveness of the Tunisian economy;
- 3) regulatory approximation in the priority areas that will be identified by Tunisia.

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The fourth full round of the EU-DCFTA negotiations took place in Tunis during the week of 29 April - 3 May 2019. Discussions covered a wide range of issues including agriculture, services and sustainable development.

For each of the 4 rounds of negotiations, proposals from the EU in different areas have been made available to the public. Talks are ongoing to move towards a DCFTA, but the signature is still missing (European Commission 2022).

As highlighted above, agricultural trade liberalization is still far from achieved, placing tariff liberalization and non-tariff measures, in particular sanitary and phytosanitary standards (SPS), as well as technical barriers to trade (TBT), at the centre of the DCFTA negotiations since the first round (Raza et al., 2022). Under the fourth and last round, Tunisia reiterated its request to provide urgent measures in favour of strategic sectors for Tunisia such as olive oil and textiles, and other sectors (ALECA, 2019). It is worth noting that Tunisia applies a higher level of agricultural tariff protection vis-à-vis the EU than the EU does vis-à-vis Tunisia, so on the latter fall the greater effort in dismantling tariffs in response to DCFTA (Raza et al., 2022).

The EU proposal concerning trade in agricultural, processed agricultural and fisheries products takes into account sensitive points of both sides and is based on some strategic elements of negotiation (European Union, 2016a):

- 1) the list of sensitive, not-liberalized, products (negative list) which require specific treatments (e.g. tariff quotas);
- 2) dismantling schedules, transition periods for Tunisia, and rate of increase in tariff quotas;
- 3) the adjustment of the entry price regime.

The EU proposal for the trade and sustainable development chapter is designed to ensure that the DCFTA's sustainable development commitments are aligned with multilateral governance on these issues by incorporating them into the international consensus. In line with this objective, Article 1 of the Chapter refers to key international policy documents and declarations on sustainable development, as well as declarations on sustainable development at the international level. The Parties are committed to pursuing sustainable development in their trade relations.

The objective of this chapter is not to harmonize national legislation, but to create a shared commitment that will guarantee the highest level of protection for workers and the environment. It ensures that the Parties comply fully with their international obligations and effectively implement their labour and environmental legislation.

Governance obligations and multilateral agreements on work and the environment are included in the proposal. Articles 4 and 5 place particular emphasis on core labour standards and International Labour Organisation (ILO) conventions, as well as on the main multilateral environmental agreements (MEAs) such as the United Nations Convention on Biological

Diversity (CBD), the Convention on International Trade in Endangered Species (CITES) and the United Nations Framework Convention on Climate Change (UNFCCC).

The focus of articles 6 to 9 is on specific areas within the DCFTA and they aim to identify business and investment practices that have significant potential to promote sustainable development goals, specifically:

- sustainable management of natural resources (forest and fisheries biodiversity);
- fair and ethical trade;
- corporate social responsibility (CSR).

Finally, Articles 10 to 12 include provisions that address good practice in the area of scientific information, transparency, and sustainability impact assessment of DCFTA.

3. Sustainability Impact Assessment (SIA)

3.1 The SIA methodology

According to OECD (2010), the Sustainability Impact Assessment (SIA) is a process for assessing the effects of proposed policies, strategies, plans or programmes before they have been formulated (*ex-ante*). SIA is based on important principles, among which there are the full integration into the assessment of all three sustainable development aspects (economic, social and environmental), the use of a variety of tools and methodologies to capture qualitative aspects of sustainability, and the stakeholders involvement.

In the view of the EU, the SIA contributes to sound, evidence-based and transparent trade negotiations, integrating issues of sustainable development into trade policy (European Union, 2016b).

As part of the negotiation process, a Trade Sustainability Impact Assessment (TSIA) was produced in 2013 by Ecorys to assess the potential economic, social (including fundamental rights) and environmental impact of a DCFTA to be negotiated between the EU and Tunisia.

The TSIA has been based on two methodological elements: quantitative and qualitative analyses for economic, environmental and social assessments and stakeholder consultations. To assess the impact of a DCFTA, a Computable General Equilibrium (CGE) model was developed based on a reduction in tariffs for the agricultural sector (an 80% reduction in tariffs in Tunisia on imports from the EU and a 95% reduction on agricultural tariffs in the EU on imports from Tunisia) as tariffs on industrial goods were previously eliminated under the AA. Moreover, the expected impact of DCFTA is based on the assumption of regulatory approximation, in sectors such as SPS and TBT. The results of the CGE model were complemented by additional quantitative and qualitative social and environmental analyses. Along with the overall analysis, a sectoral analysis for four selected sectors and a horizontal (cross-cutting) issue resulting from a scoping exercise were provided. Six sectors were identified as potentially relevant for the broad sectors of the economy. For the agricultural sector, vegetables, fruits and nuts have been selected. As regards the horizontal issue, water scarcity and quality have been selected notwithstanding regulatory approximation has been considered as a potential issue to deepen.

Table 3- Scenario DCFTA modelling

Element	Liberalisation
Tariff liberalisation	<ul style="list-style-type: none"> • EU → Tunisia: 80% liberalisation for agricultural sectors; • Tunisia → EU: 95% liberalisation for agricultural sectors; • EU → Tunisia: 100% liberalisation for all remaining sectors; • Tunisia → EU: 100% liberalisation for all remaining sectors.
Services liberalisation	<ul style="list-style-type: none"> • EU: 3% reduction in TCEs; • Tunisia: 8% reduction in TCEs.
Other NTMs	<p>EU exports to Tunisia:</p> <ul style="list-style-type: none"> • 4% point reduction in TCE for the ambitious liberalisation scenario; • 2% point reduction in TCE for the limited liberalisation scenario; • 0% point reduction in TCE when there is no liberalisation foreseen; • 2% point reduction in TCE for all agriculture & manufacturing sectors due to trade facilitation. <p>Tunisia exports to EU:</p> <ul style="list-style-type: none"> • 8% point reduction in TCE for the ambitious liberalisation scenario; • 4% point reduction in TCE for the limited liberalisation scenario; • 0% point reduction in TCE when there is no liberalisation foreseen; • 2% point reduction in TCE for all agriculture & manufacturing sectors due to trade facilitation.

Source: Ecorys (2013)

3.2 Impacts on macroeconomy level

According to Ecorys' final report (2013), trade liberalization resulting from DCFTA results in an increase in national income in both the EU and Tunisia, with more pronounced effects on the latter economy measured concerning GDP. The different estimated effects between the two parties are asymmetric, reflecting the importance of trading partners for each other, as seen above (Lannon, 2014). On the expected gain in national income of the DCFTA, the most important contribution comes from the lowering of NTMs in goods, while agricultural tariff reductions are the second most important measure.

The DCFTA impact on trade flows is also significant for Tunisia. Trade liberalization with the EU translates into an improvement in Tunisia's trade balance in relative terms, resulting from an expected increase in total exports of 20% and an 18% increase in total imports in the long run. The wage increase translates into an improvement in the purchasing power of Tunisian citizens, despite the increase in consumer prices.

The agricultural sector is expected to be the biggest winner of the DCFTA, although the importance of the agricultural sector in production (15% of the total added value in Tunisia alongside the food sector) is not reflected in the export flows from Tunisia to the EU. Only 4% of total Tunisian exports to the EU (2013) stem from food and agricultural products. The most significant effect in value added is expected in the vegetable oils sector (+223%), mainly resulting from the EU tariff reduction and the subsequent rise in exports. However, this increase would have a limited impact on the sector due to the insignificant share of total value added in the baseline scenario (0.15%). While vegetables and fruit sector, a very large sector both in terms of employment and value added, is estimated to expand by 4 to 5%, thanks to the increase in domestic and international demand.

From the trade point of view, the largest relative increase in Tunisian exports is expected for vegetable oils (+240%), thanks to the lowering of EU tariffs, with the EU expected to become the first export destination of Tunisian vegetable oil exports. This increase, however, has a limited impact on Tunisian export of vegetable oils, whose share of total exports will expand from 1.8 to 5.1%.

3.3 Impacts on social and human rights

On average, welfare in Tunisia increased by 9.1% in the long run as a result of the DCFTA. The average consumer price increase is more than compensated for the increase in wages. In relative terms, for less skilled labour wages increase less than more skilled labour in the long run; this is a key point if we consider that in the baseline scenario the agricultural sector accounts for 2% of the total employment of skilled labour and 25% of less skilled labour. Poverty is also expected to decline as a result of these changes in disposable income. However, since the increase in disposable income is mainly due to the increase in wages, the unemployed who are just above the poverty line are at risk due to the increase in the level of consumer prices by not benefiting from the increase in wages. Due to the increase in demand for goods and services, the wage increases reflect the higher demand for labour. Therefore, employment is likely to increase, although the expected reallocation of workers between sectors may be difficult for vulnerable groups. The CGE model estimates that close to 11% of the less skilled and 8% of the more skilled labour change sectors in the longer run, putting under pressure the Tunisian economy.

According to Ecorys, the status quo situation highlights a Tunisian economy in transition from a traditional agriculture-oriented structure to a modern industrialised economy. In 2010, a

Case Study Tunisia – Olive oil

survey highlighted a high share of informal employment, the majority of which were employed in the agricultural sector. The majority were young people, self-employed and with professional qualifications. Moreover, female labour participation was low (25.3% in 2010) (Ecorys, 2013).

The Ecorys analyses did not identify any significant impact of the DCFTA on social security and social dialogue. The World Social Security Report (ILO, 2010) rated the Tunisian social security system as “comprehensive”, consisting of both social insurance schemes for workers and social assistance for the inactive and workers ineligible for social insurance schemes. As regards social dialogue, basic trade union rights are guaranteed, including the right to strike.

As regards human rights, according to Ecorys the overall effect of the DCFTA in Tunisia is likely to be small but positive (Figure 4).

Figure 4- Summarised impacts of the DCFTA on the Decent Work Agenda in Tunisia



Source: Ecorys (2013)

3.4 Impacts on environment

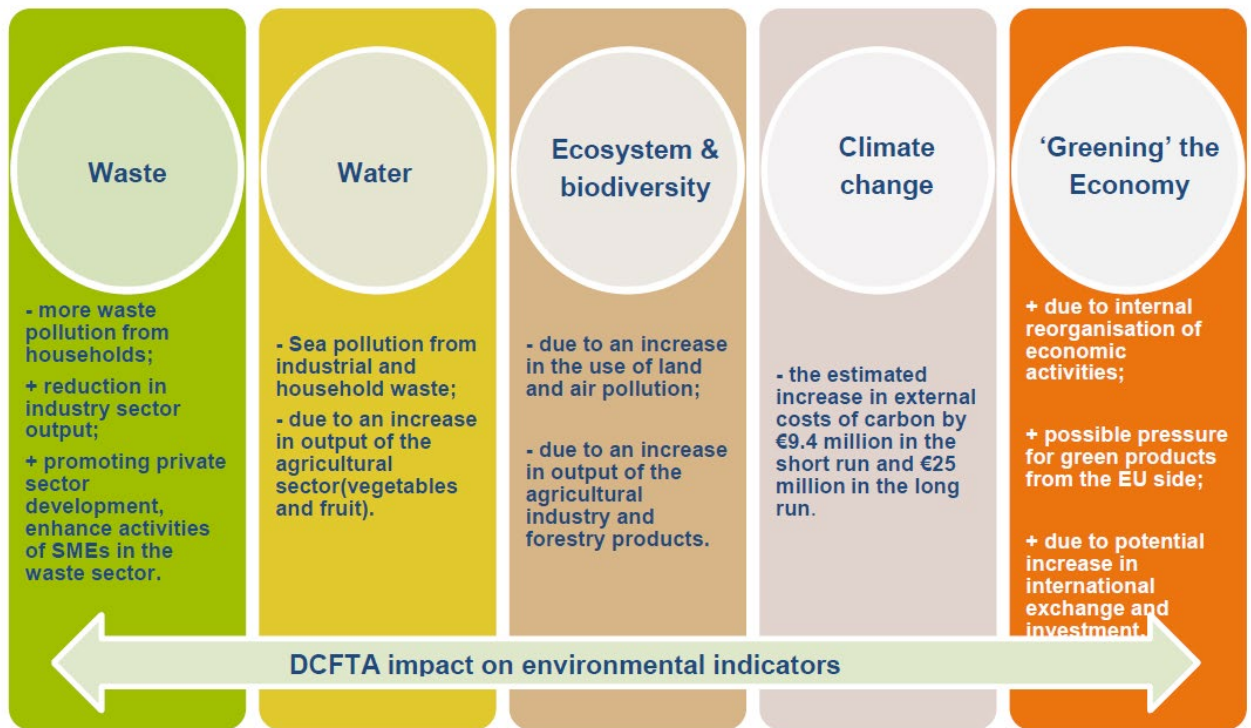
The DCFTA is expected to bring both positive and negative environmental effects at the same time. The sign of the overall impact is difficult to predict with certainty.

The CGE model estimates an increase in the emissions of CO₂ in Tunisia (+5.0% compared to the status quo) and +1.4% land use intensity. The same indicators for the EU are negligible in relative terms.

In terms of air pollution, due to the growth in economic activity expected from the DCFTA in the short run (rise in Tunisian GDP), quantitative analysis shows that emissions of NO_x (nitrogen oxides) and SO_x (sulphur dioxide), that cause acid rain, decline and Particulate Matter (PM) emissions show a modest increase, mainly due to a shift in economic activity towards sectors with lower air pollution intensities. In the long run, the higher GDP growth (+7.4%) translates into an increase in air pollution related to the emissions of SO_x and PM. In monetary terms, the long-run negative effects of air pollution would lead to an increase in external costs of €40.2 million.

The improvement in general economic activity in Tunisia implies more waste production by households. According to Ecorys is difficult to estimate the net effect of the impact of DCFTA on waste production given the different driving forces at play (Figure 5).

Figure 5- Summarised impacts of the DCFTA on the environment



Source: Ecorys (2013)

Water scarcity and quality are serious environmental issues for Tunisia. The annual average of water availability in Tunisia is 465 m³ per capita which is well below the water poverty threshold of 1,000 m³ per capita per year (FAO, 2009) and classifies the country in a situation of absolute scarcity. Water pollution, notably chemical and bacteriological contamination, is another important issue in Tunisia. The increase in the fruit and vegetable sector (and in particular olives and palm trees – among the most intense) is likely to further increase water scarcity, due to the use of irrigation in the sector. The expansion of the sector may also negatively affect water quality (e.g. through salinization or increased use of fertilizers). On the positive side, some of the more polluting industries are expected to contract due to the DCFTA.

4. EU-Tunisia DCFTA: an analysis of sustainable development

Numerous studies investigated the possible impact of trade liberalization arising from the future DCFTA between Tunisia and the EU.

Rudloff and Werenfels (2018) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, 2019) highlight the Tunisian scepticism towards a DCFTA that hinders reaching an agreement, considered unbalanced and trapping Tunisia in low value-added activities. The authors note a lack of knowledge about the agreement and its content both in civil society and business and a lack of participation of Tunisian academics in public discussion to assess the possible impacts of the DCFTA. “*Tunisia is not ready for the DCFTA*” is the title of a joint position document signed in May 2018 by a group of NGOs⁹⁶ because “*DCFTA risks reducing Tunisia's political leeway to face its social and economic challenges*” (FTDES et al., 2018), suggesting taking time to reflect and evaluate and recommending several possible adjustments to the negotiation process.

Rudloff (2020) analyses the results of some existing impact assessment studies on the three pillars of sustainability - economic, environmental and social - reiterating how the Tunisian researcher's participation is limited. From the economic impact point the view, Rudloff shows that most studies predict overall economic growth in Tunisia arising from tariff reduction. The agricultural sectors most benefitted are olive oil and fruit and vegetable products, while those negatively affected are cereals, milk and meat. However, the positive effect of trade liberalization must consider the role of non-tariff measures in stimulating trade. This aspect is sidelined by studies because of the difficulty of modeling. Only one study (Gasiorek and Mouley, 2019), among those considered by Rudloff, explicitly considers the dismantling of NTMs through a partial equilibrium model to see the separate and aggregate effect of tariff changes and NTM changes. The results highlight that integration based only on tariff reduction is likely to put more burden on Tunisia because the EU has already liberalised its tariffs. Potential significant gains for Tunisia arise if the DCTFA significantly reduces non-tariff barriers between the EU and Tunisia implying adjustment costs that should be accompanied by “policies facilitating structural industrial change and adjustment assistance to those most negatively impacted” (Grumiller et al., 2018). The aspect of the accompanying policy also emerges about the social impact, since the adjustment process resulting from trade

⁹⁶ Forum Tunisien pour les droits économiques et sociaux (FTDES) – CNCD-11.11.11 – International Treatment Preparedness Coalition (ITPC) MENA – Euromedrights – Transnational Institute (TNI).

liberalization produces negative effects for the less competitive agricultural sectors and their workers. Ambiguous results emerge from the relationship between trade and ecology. From the studies analysed by Rudloff, an increase in CO₂ emission, water consumption and plastic consumption emerges. On the other hand, the loss of profitability could result in the abandonment of crops in ecologically fragile and/or low-yielding areas and the reduction of Tunisian cereal production, which is one of the main factors of soil degradation.

Ben Rouine and Chandoul (2019) focused on the tariffs and non-tariff measures impact of the new agreement, highlighting how in both cases the greatest liberalization effort would be borne by Tunisia. From the tariff point of view, the EU protects its internal market more through internal support policies, which allows it to keep its internal prices artificially low, than the tariff regime. On the other side, the rapprochement of Tunisian legislation with the community acquis has prohibitive costs. The European SPS system is one of the most complex and rigorous and is more stringent than international standards. Therefore, Tunisia should comply with international standards, to allow better diversification of the market and favour an “equivalence” approach more suited to the conditions and reality of the Tunisian agricultural sector.

The regulatory approximation under DCFTA has been assessed, from the economic and social effects on the Tunisian agricultural sector point of view (Raza et al., 2022). Through a CGE model powered by interviews with Tunisian exporters to the EU and agricultural producers, the study estimated the costs of compliance with the new standard and simulated the effects on the agricultural and food sectors in Tunisia. The study highlights the negative impact on agricultural value added of full harmonization with EU standards, with more pronounced effects on sectors that mainly serve the internal market, even if accompanied by bilateral tariff liberalization. Strong productivity increases could change the sign of the effects but would put pressure on other sectors (i.e. for the absorption of the workforce abandoning agriculture) and natural resources (i.e. the greater demand for water in export-oriented production). This aspect relies on the need to well understand “the tradeoffs between agricultural trade liberalization and the goals demanded by SDG 2” (Raza et al., 2022). The authors underline the need to build a Tunisian negotiation position coherent with a strategic vision of sustainable agricultural development, to achieve the SDG 2 “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”.

Lejmi (2021), in relation to the SPS harmonisation, highlights the role of DCFTA as a lever: i) for improving human capital by training farmers, farm workers and qualified personnel; and ii) for moving towards a more digitalized agriculture. The need to better include protection of social and economic rights in the DCFTA is also highlighted (Lejmi, 2020).

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The link between trade and sustainable development was examined by Grumiller et al. (2018a) and Tröster et al. (2018). The authors highlight the need to take into account the geo-political specificities of Tunisia and adapt trade policy accordingly. In the case of Tunisia, short-term benefits and safeguarding of socio-territorial cohesion should be at the centre of trade liberalization to help the country's political transition and contribute to its economic and democratic consolidation. The authors underline that, when promoting human rights and labour standards, the EU currently favours the dialogue approach over hard conditionalities. According to the authors, for economic growth to be truly inclusive and take into account the rights of the most vulnerable groups of workers (especially women), greater ownership of the EU institutions in the chapter on sustainable development within the DCFTA and greater support for cooperation between the EU and partner country civil society will be needed. Another aspect to take into consideration is the promotion of employment that pays decent wages and promotes good working conditions. In this regard, trade policymakers need to assess the impact of trade liberalization on public budgets, since tariff liberalization reduces public income precisely at the time when additional funds are needed to alleviate the costs of social adjustment in sectors most negatively exposed to structural changes (those who have been displaced by the increase in imports). This is possible through social and employment policies in partner countries, but often such policies do not exist or are not adequately resourced: it is the case of Tunisia. Therefore, if necessary, temporary budgetary support should be provided and domestic resource mobilization promoted.

5. Tunisia olive oil value chain and sustainable development

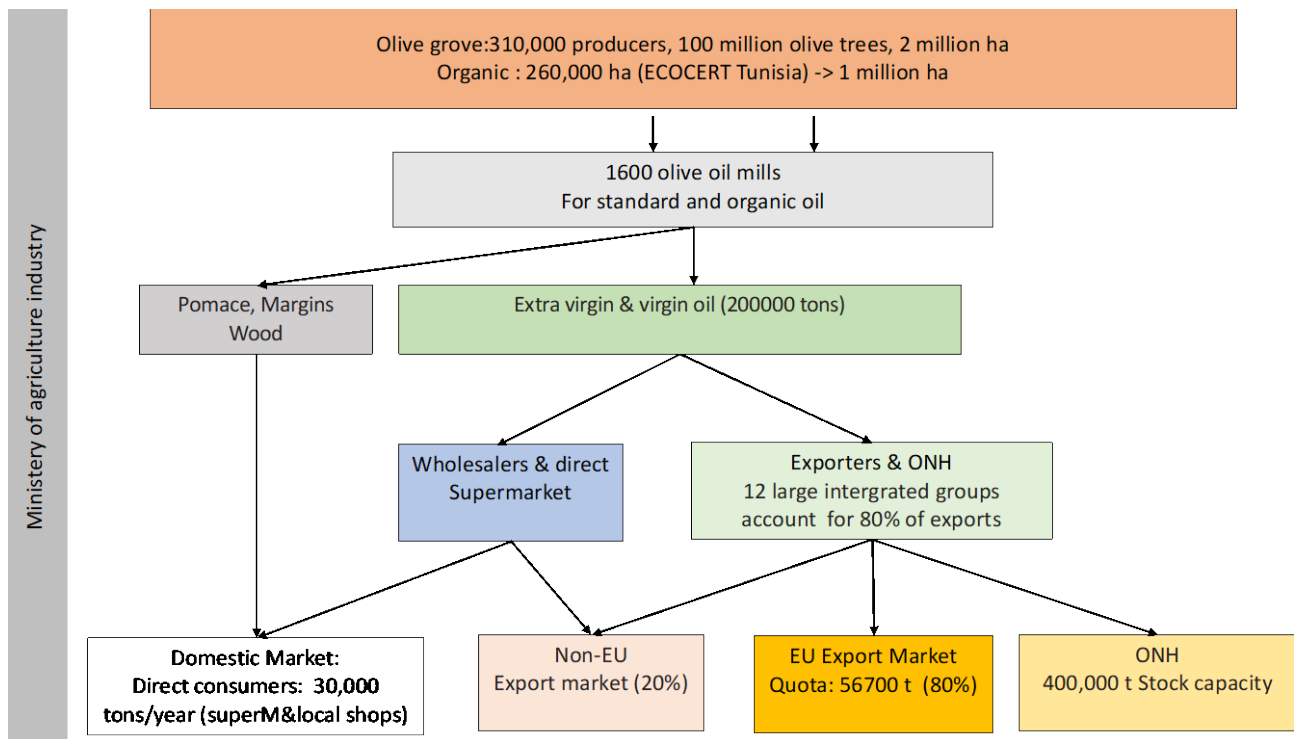
5.1 Structure of olive oil value chain

Tunisia's olive oil sector has experienced significant changes since the country's independence from France. The National Olive Oil Center (ONH)⁹⁷, a governmental agency, used to control the olive oil sector, but the deregulation process since the mid-1990s increased the relevance of private exporters, which currently have a dominant position due to their access to finance and stronger control over the value chain (Grumiller et al., 2018b).

The main segment of the olive oil value chain in Tunisia includes around 310,000 farmers (Figure 6) of which around 72% are considered smallholders, as they cultivate less than 10 hectares (Grumiller et al., 2018a). Although smallholders play a significant role in olive oil production, they face competition from large monoculture olive farms, which account for over 60% of the total olive cultivation area (Jouili, 2023). Moreover, the Tunisian olive oil industry comprises around 1,600 mills located throughout the country, which are devoted to standard and organic olive oil manufacturing. The processing chain encompasses various industrial firms with diverse expertise: oil refining, valorization of specific by-products, conditioning and packaging (Jouili, 2023).

⁹⁷ Office National de l'Huile (ONH)

Figure 6- Tunisian olive oil value chain



Source: own elaboration

Considering the deregulation process and government incentives, the olive oil cultivation area experienced substantial and unplanned growth: from 1.45 million hectares in 1994 to 1.96 million hectares in 2020 (Jouili, 2023). Approximately 40% of olive trees have been planted in areas that could be classified as marginal for olive cultivation, resulting in low productivity of olive farms (Jouili, 2023).

5.2 Olive tree cultivation systems

A non-exhaustive review of the scientific literature has been conducted to analyze the prominent cultivation systems adopted in the country.

In a comprehensive study conducted by Abdallah et al. (2021), an analysis was carried out on a total of nine olive oil production systems. These systems encompassed six traditional methods, two intensive approaches, and one super-intensive system. The study accounted for variations in production type (conventional and organic), water management strategies

Case Study Tunisia – Olive oil

(irrigation and rainfed), and nutrient management practices (fertilization, fertigation and no fertilization) as outlined in Table 4. The assessment of environmental impacts associated with olive oil production was conducted using the Life Cycle Assessment (LCA) methodology. This methodology was employed to calculate and evaluate the ecological footprint and sustainability linked to each of the production systems.

Table 4- Systems representatives of the actual production of olive fruit in Tunisia

Production systems in Tunisia			Main features of the production systems				
<i>Traditional/Intensive/Super-intensive</i>	Conventional/Organic	Total area (%)	Irrigation/Rainfed	Fertilization/No fertilization/Fertigation	Acronym	Density (trees ha-1)	Main cultivar
TRADITIONAL	CONVENTIONAL	81.8	IRRIGATION RAINFED	FERTILIZATION	TCIF	17–34	Chemlali
				FERTILIZATION NO FERTILIZATION	TCRF	17–34	
	ORGANIC	13.6	IRRIGATION RAINFED	FERTILIZATION	TCR	17–34	
				FERTILIZATION NO FERTILIZATION	TOIF	17–34	
INTENSIVE	CONVENTIONAL	4.6	IRRIGATION	FERTILIZATION	TORF	17–34	Chemlali
				FERTIGATION	TOR	17–34	
SUPER-INTENSIVE	CONVENTIONAL		IRRIGATION	FERTIGATION	ICIF1	204–278	Arbosana
				FERTIGATION	ICIF2	416–555	
					SICIF	1250–1666	Arbequina

Source: Abdallah et al. (2021)

The impact categories selected for the analysis were climate change, acidification, freshwater eutrophication and freshwater ecotoxicity. Table 5 presents the main characteristics of these production systems during the full production phase.

Table 5- Main characteristics of the olives production systems during the full production phase (annual average)

Production systems in Tunisia			Main features of the production systems				
<i>Traditional/Intensive/Super-intensive</i>	Conventional/Organic	Total area (%)	Irrigation/Rainfed	Fertilization/No fertilization/Fertigation	Acronym	Density (trees ha-1)	Main cultivar
TRADITIONAL	CONVENTIONAL	81.8	IRRIGATION RAINFED	FERTILIZATION	TCIF	17–34	Chemlali
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	ORGANIC	13.6	IRRIGATION RAINFED	FERTILIZATION	TCR	17–34	
				FERTILIZATION NO FERTILIZATION	TOIF	17–34	
INTENSIVE	CONVENTIONAL	4.6	IRRIGATION	FERTILIZATION	TORF	17–34	Chemlali
				FERTIGATION	TOR	17–34	
SUPER-INTENSIVE	CONVENTIONAL		IRRIGATION	FERTIGATION	ICIF1	204–278	Arbosana
				FERTIGATION	ICIF2	416–555	
					SICIF	1250–1666	Arbequina

Source: Abdallah et al. (2021)

It was observed that, when considering food production (ton), the intensive and super-intensive olive production systems resulted in less environmental impacts for all categories concerning the rest of the systems (Abdallah et al., 2021). However, the innovative systems produced higher impacts per cultivated area (hectare) due to a major level of mechanization of soil

management, pruning and harvesting operations and major chemical inputs adopted (Abdallah et al., 2021). The traditional olive oil cultivation systems presented lower environmental impacts per hectare than the intensive ones due to low chemical input, low energy and water consumed and low crop management operations, but their productivity was also much lower (Abdallah et al., 2021). Overall, the organic systems showed the lowest environmental impacts compared to the traditional and conventional systems due to lower amounts of fertilizers and the absence of pesticides applied. However, the productivity in the organic systems was also lower compared to the conventional systems (Abdallah et al., 2021). In conclusion, the study conducted by Abdallah et al. (2021) highlights that fertilizers and soil management emerged as the agricultural practices with the most detrimental effects across multiple environmental categories, including climate change, acidification, freshwater eutrophication, and freshwater ecotoxicity. Consequently, prioritizing the implementation of integrated management practices, coupled with the provision of effective extension services and farmer training programs, should be considered essential steps towards enhancing the overall sustainability of the olive oil sector (Abdallah et al., 2021).

The same conclusions have been also supported by other studies based on the Tunisian olive oil sector.

Fernández-Lobato et al. (2022) performed an analysis of the environmental impact of Tunisia's primary olive grove cultivation systems: extensive rainfed, intensive and super-intensive methods. Results from the LCA highlighted the most significant environmental impact on climate change category is associated with the intensive production systems, which exhibit a 9.6% higher impact, while super-intensive farming shows an 18.8% lower impact (Fernández-Lobato et al., 2022). The authors' conclusions emphasized that agricultural activities at the field level play a pivotal role across all impact categories within the olive oil value chain, ranging from 84.7% in photochemical ozone formation to 99.9% in land use. Therefore, the adoption of agricultural best practices (eg. reduced tillage, use of organic amendments) to increase yields under rain-fed conditions is a key solution to ensure the sustainability of the Tunisian olive groves (Fernández-Lobato et al., 2022).

The study conducted by Elfkih et al. (2022) examined in detail the sustainability of organic olive farms in Tunisia's Mahdia region. By using Principal Component Analysis and the multicriteria ELECTRE III method, the authors identified six distinct farmer groups characterized by varying attitudes, performances and sustainability levels. Elfkih et al. (2022) underscored the significance of promoting organic olive cultivation as a model of sustainable agriculture. These strategies could be pivotal in promoting Tunisian organic olive oil as a distinguished brand. Notably, it was especially relevant given that a majority of olive cultivation in Tunisia (92%) relied on rain-fed practices with limited use of chemical fertilizers, making olive cultivation highly adaptable to the organic farming system (Elfkih et al., 2022).

5.3 Water issues in Tunisia

The North African region is projected to face heightened vulnerability to adverse climate change impacts (Rochdane et al., 2014). This area grapples with low rainfall patterns characterized by high variability, which has significantly affected agricultural production systems. According to the Falkenmark water stress index⁹⁸, Tunisia has been classified as a region experiencing water scarcity, with less than 1,000 m³ per capita per year. The study conducted by Soula et al. (2021) highlights a concerning outlook: the increasing water demand resulted in a decline in the per capita availability of conventional water resources, dropping from 467 m³ in 2010 to 359 m³ by 2030. Additionally, the volume of water accessible per capita decreased from 310 m³ in 2010 to 290 m³ by 2030 (Soula et al., 2021).

Access to water for agriculture has drastically diminished in recent years (Chebil et al., 2019). Water allocation for human consumption and agriculture stood at 20-30% and 70-80%, respectively (Chebil et al., 2019). These figures have since reversed, with agriculture receiving only 20-30% of the available water, while the majority is directed towards human consumption (Chebil et al., 2019). According to Chebil et al. (2019), the decrease in precipitation, coupled with increased evapotranspiration, had led to water shortages, especially in countries like Tunisia, where water resources were scarce and irrigated cultivation areas had expanded in recent years. Moreover, Tunisia experienced a series of multi-year droughts lasting from 3 to 7 years, with varying degrees of severity. These droughts exacerbated water scarcity and significantly impacted the agricultural harvest (Soula et al., 2021). Furthermore, the increase in groundwater pumping for irrigation induced a serious decrease in groundwater levels, depletion of springs and degradation of oasis ecosystems (Vernoux et al., 2020). Significant groundwater resources were located in southern Tunisia, but these resources, which were the primary supplies in the Middle East and North Africa (MENA) coastal region, had come under growing pressure in response to population and economic growth (Vernoux et al., 2020). Agriculture is highly dependent on water availability, impacting not only food production but also various social and economic dimensions, including employment rate. As suggested by Chebil et al. (2019), to mitigate negative economic and social effects, there is a need to promote water-efficient cultivation systems and enhance the integration of farmers into value chains, resulting in improved and more equitable producer prices (Chebil et al., 2019).

⁹⁸ <https://www.eea.europa.eu/data-and-maps/figures/annual-water-availability-per-person>.

5.4 Main strategies to overcome water scarcity in the Tunisian olive oil sector

In Tunisia, olive cultivation takes place across a wide spectrum of climatic conditions: 15.7% in the northern regions, 39.4% in the southern regions, 16% along the Sahel-coastal areas, and 28.9% in central Tunisia (Fernández-Lobato et al., 2022). Average annual temperatures fluctuate, reaching 35°C in the south and 20°C in the north. There is compelling evidence to suggest that without advancements in irrigation technology, Tunisia will face a significant challenge in meeting its irrigation needs by 2080–2090 due to population growth and global warming (Radhouane, 2018).

Most irrigation water comes from aquifers, as dam reservoirs meet only a small percentage of agricultural water needs (Chebil et al., 2019). In this context, the production of olive oil has long been a crucial endeavour. Traditionally, olive tree production followed a cyclical pattern, leading to periodic spikes in olive oil yields. However, over the past years, Tunisia faced a daunting challenge with a few years marked by prolonged droughts (Soula et al., 2021). This unrelenting drought had a profound impact on olive tree productivity, forcing olive trees to reduce or suspend fruit production to conserve vital resources for survival (Boussadia et al., 2023). As a result, there was a noticeable extension of unproductive periods, causing olive trees that had previously borne fruit every other year to yield olives only every three to four years due to the persistent drought. In some cases, the severity of the drought even made olive trees susceptible to pests and diseases (Canale et al., 2019).

Several strategies and actions have been implemented in the country to deal with water scarcity. These are presented below:

Innovative water management: Tunisia responded to the challenges posed by drought with innovative irrigation methods, such as the utilization of cisterns tracked by tractors for precise irrigation. This approach, endorsed by the International Olive Council for its sustainability, yielded impressive results. Implementing this straightforward technique on just 6% of the olive groves led to a 40% increase in olive oil production (DGPA, 2020). The cost of this irrigation method averaged around 1,000 Tunisian dinars per hectare, with water consumption varying between 2,000 m³ to 3,000 m³ per hectare (DGPA, 2020). Furthermore, Tunisia explored alternative irrigation techniques, including underground irrigation, to minimize water evaporation (UNDP, 2022). Another effective technique for enhancing water management at the field level involved crop diversification by intercropping legumes between rows of olive trees (AGFORWARD, 2017). This approach effectively minimized evaporation through capillary action while enriching the soil with nutrients (Chelab et al., 2019).

A strategy to address water scarcity may involve saving water in the production of olive oil, both during the agricultural phase and during the processing phase. To reduce the pressure on the water resource, it seems essential to intervene during the agricultural phase, which is always the most critical phase in terms of water consumption. Saving water, rationalizing its use, and maximizing its productivity requires new policies based on water demand management (Letseku et al., 2022). Two indicators, such as virtual water and water productivity, are suggested by Elfkhi et al. (2023) to assist decision-making policies to address the issue of water demand efficiency use in olive oil sectors.

Sustainable intensification: Almond trees were introduced into olive groves to promote biodiversity. However, the prolonged drought led to a decline in the health and vitality of many almond trees. In response to changing conditions, particularly in Sfax, the decision was made to uproot the deceased almond trees and replace them with olive trees. This adaptation, driven by the necessity to respond to evolving climate change effects, included implementing high-density planting techniques and utilizing irrigation methods to maximize yields (Larbi et al., 2017).

Wastewater recycling: Olive oil production in Tunisia has significant environmental consequences, particularly concerning surface and groundwater contamination due to inadequate treatment and disposal of olive mill wastewater. The country is estimated to generate over 700,000 tons of olive mill waste and approximately 450,000 tons of olive husk annually (Grumiller et al., 2018a). While Tunisia has been a pioneer in wastewater treatment in the southern Mediterranean region, boasting 122 wastewater treatment plants that produced around 374 million m³ of treated wastewater in 2018 (MA, 2018), the rate of reuse has remained stagnant for years, not exceeding 30% (MA, 2018). One proposed approach involves using treated wastewater for irrigating olive groves, serving a dual purpose of providing water and acting as a natural fertilizer (FAO, 2015). Other potential avenues include the utilization of byproducts: for instance, husks can be used for animal feed and/or energy production. These initiatives hold promise, especially in light of the constraints imposed by limited water availability (Donner et al., 2022).

Farmer's participation in water governance: Since the 2000s, the Tunisian government encouraged farmer engagement in water resource governance. This initiative was initially facilitated through Collective Interest Groups and later expanded via Agricultural Development Groups (Bied-Charreton et al., 2006; Ballet et al., 2009). Nevertheless, despite these efforts,

the policy of collective action did not bring about a significant shift in the power dynamics, which continued to be dominated by the central administration. As recommended by Soula et al. (2021), it is crucial to revisit water management strategies, encompassing mobilization and collective action, pricing reforms, and legislative frameworks, to ensure water conservation, quality and sustainability.

National Water Program: Tunisia initiated an ambitious National Water Program that was scheduled for completion in 2050 (MA, 2022). This program encompassed desalination plants powered by solar energy, dam construction, water reservoirs, and urban water collection. Although desalination plants were part of the plan, it was primarily intended to meet the water needs of urban areas due to the high cost of aqueduct transportation, making water less viable for agricultural purposes (MA, 2022).

6. Stakeholders discourse about DCFTA

6.1 Research design

Our research aims at examining how non-product related agricultural issues are addressed in EU Free Trade Agreements (FTAs), and how effective the EU collaborative approach to Trade and Sustainable Development (TSD) chapters is.

In the case of Tunisia, we will first examine the impact analysis based on SIA done by Ecorys report (2013), to answer the following questions: Do Sustainability Impact Assessments include and address all relevant potential environmental impacts of the agreement under negotiation? How do local stakeholders evaluate the DCFTA agreements' impacts on non-related products?

6.2 Methodology

The methodology adopted in the WP2 e WP4 refers to the work of Harrison et al. (2019), which focuses on labour standards, by undertaking a focused examination of the practical impacts of environmental provisions. Semi-structured interviews with four groups of stakeholders (government officials; national industry representatives, traders and processors; local civil society and NGO; and farmers' unions) were carried out.

As the project does not have partners from Tunisia, we worked with the Tunisian Olive Oil Board (ONH) and a quality manager expert to identify the main relevant stakeholders. We interviewed 16 stakeholders of the Tunisian olive oil Global Value Chain (GVC) in Tunisia, from January 29 to February 5, 2023. With these 16 interviews, we reached thematic saturation. The concept of saturation was developed by Glaser and Strauss (1967) as *theoretical saturation* (Hennink & Kaiser, 2022). More widely, the concept is used in qualitative research, where it is typically called *data saturation* or *thematic saturation* (Hennink et al., 2017).

Saturation is a relevant indicator establishing: i) a sample is adequate for the phenomenon studied; ii) data collected have captured the diversity, depth, and nuances of the issues studied and demonstrates content validity (Francis et al., 2010).

Table 6 provides a detailed list of stakeholders interviewed, classified by typology, category, role/institution, along with the number of persons interviewed. Then, for each element of the Tunisian olive oil GVC covered, we analyze its sustainability and how trade affects it. Participants were asked about:

- Functioning and main challenges in the olive oil value chain;
- Opinion on the olive oil production sustainability (economic, social and environmental);

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- International market requirements (volumes, prices and certifications);
- Organic olive oil market and evolution;
- The EU-Tunisia current agreement and the next round of DCFTA discussions;
- The link between Trade and sustainability.

Table 6- List of stakeholders interviewed

Stakeholder typology	Category	Role/Institution	Number
Agricultural holding	Smallholder producers	<ul style="list-style-type: none"> • Small-scale farmer • Agricultural advisor at the Olive Institute 	2
	Large olive oil producer	<ul style="list-style-type: none"> • Director 	1
Supply chain operators	Public company and private retailer	<ul style="list-style-type: none"> • Chief Executive - ONH • Commercial Director- ONH • Carrefour 	3
	Olive oil exporters	<ul style="list-style-type: none"> • Chief Executive Officer of Packtech • Exporter 	2
	Exporters' union	<ul style="list-style-type: none"> • Tunisia Export Promotion Center 	1
Stakeholders dealing with sustainability issues	International organization	<ul style="list-style-type: none"> • FAO Tunisia 	1
	Irrigation systems expert	<ul style="list-style-type: none"> • Agriculture expert at the Ministry of Agriculture 	1
	Academic researcher	<ul style="list-style-type: none"> • Agronomist 	1
Policymakers	Representative of the Minister's office	<ul style="list-style-type: none"> • Chief of Staff at the Ministry of Agriculture 	1
	Development and production departments	<ul style="list-style-type: none"> • Director General of the Development Department at the Ministry of Agriculture • Director of the Plant Production 	2

		Department at the Ministry of Agriculture	
	Organic production department	<ul style="list-style-type: none"> • Director of the Organic Production Department at the Ministry of Agriculture 	1
	Total		16

6.3 Qualitative study findings

Table 7 summarizes the main results of the interviews by distinguishing outcomes depending on the stakeholder's category.

Olive oil production is characterized by smaller and large producers with several cultivation systems, such as organic versus commercial and intensive cultivation. This difference leads to challenges and opportunities going from pest management, water resources, and irrigation methods to the implementation of innovative techniques able to increase production sustainability.

Tunisian larger producers strongly support the DCFTA trade agreement and the liberalization of the EU market because of their role as competitors of Spanish and Italian producers. However, environmental concerns emerge particularly regarding water scarcity and desertification. Prolonged drought periods because of climate change are more frequent and result in water stresses, therefore stakeholders invoke the adoption of new water-efficient irrigation methods. Olive trees are affected by adverse environmental factors such as water scarcity, heat and high irradiance, and are most sensitive to climate change. Stakeholders state the need to improve agronomic strategies to offset the loss of productivity and possible changes in fruit and oil quality and encourage the adoption of techniques able to enhance crop adaptability.

These troubles are largely debated and recognized by supply chain operators who pay attention to water and land use; indeed, the main trade liberalisation risk lies in production intensification which negatively impacts resources and marginalizes small producers. Tunisian stakeholders recognized that embracing sustainability in the olive oil value chain is crucial, therefore the future DCFTA should contain measures supporting a sustainable transition and climate change

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adaptation techniques. Another relevant issue is related to the sustainable use of fertilisers and chemical inputs in production. Stakeholders recognize fertilizer and chemical input impact on the yields and show concerns about the environmental impact of soil erosion. Furthermore, they also emphasised the need to enlarge the export market, which may represent an opportunity for modernising production techniques.

Another important challenge emerging from the interview is the issue related to the standards and certifications and the level of protection for olive oil. Stakeholders invoke an expansion of quota and/or the introduction of a specific quota for the organic olive oil. Policymakers pointed out that often EU control, permission, certifications, importation licenses and administrative procedures are heavy obstacles to the EU market. However, they are aware that the future DCFTA represents a significant opportunity for sustainability enhancements and investments to improve production and minimise environmental impact.

Table 7- Key insights from stakeholder interviews

	Smallholder producers	Large olive oil producer
Agricultural holding	<p>Olive oil production is a significant agricultural activity that involves a diverse range of producers and cultivation systems. While some producers are deeply rooted in tradition, relying on native olive varieties and organic methods, others have a more commercial focus, adopting intensive cultivation techniques. This diversity in the olive oil sector leads to different challenges and opportunities:</p> <ul style="list-style-type: none"> • Small producers primarily focus on local markets or sell their products to large olive oil exporters. • Many small producers adopt organic farming practices and cultivate native olive varieties. • Many olive oil producers face several issues, such as water scarcity, which hinders efforts to increase yield and productivity. • There is untapped potential for olive production growth through the intensification of cultivation methods. 	<p>Large producers, in particular, have taken strategic steps to secure their olive oil supply. Their efforts include the intensification of olive production through various means, with a focus on international markets:</p> <ul style="list-style-type: none"> • Large olive oil producers have integrated olive production into their operations to ensure a stable supply. • Their approach to intensification mainly involves: <ol style="list-style-type: none"> Using highly productive olive varieties, notably Spanish varieties. Implementing high-density planting techniques. Utilizing irrigation methods to maximize yields. • Large producers have also ventured into organic olive production, primarily for export to different countries.

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	<ul style="list-style-type: none"> • Expanding organic production may encounter hurdles due to pests, diseases, and other related challenges such as water scarcity. 	<ul style="list-style-type: none"> • Larger Tunisian olive oil producers have multiple subsidiaries in both EU and non-EU countries. • Large producers adopt intensive cultivation techniques and more productive varieties coming from Spain. • Large producers tend to have higher yields compared to small producers and are mainly oriented towards international trade markets • They strongly support the DCFTA trade agreement and the liberalization of the EU market, positioning themselves as competitors of Spanish and Italian olive oil producers. • Environmental concerns in the region mainly revolve around water scarcity. • The potential expansion of the EU market could increase pressure on water resources, but it also offers growth opportunities for the Tunisian olive oil sector.
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	Public company and private retailer	Olive oil exporters	Exporters' union
Supply chain operators	<p>The expansion of the agri-food sector is notably on the rise, raising concerns about its impact on natural resources. As this growth continues, it is essential to consider the negative consequences, especially concerning the olive oil production sector:</p> <ul style="list-style-type: none"> • Industrial expansion in the central region is accelerating, with a significant focus on extending industrial surfaces and intensifying various activities. • This rapid expansion poses a potential threat to vital resources, especially water and land. • With the market's expansion, there is a growing concern about its potential adverse effects on olive oil production, given the existing water scarcity in the region. 	<p>In the Tunisian olive oil industry, a few producers play a pivotal role in terms of production and overall exports:</p> <ul style="list-style-type: none"> • Only 12 enterprises are responsible for exporting approximately 80% of Tunisia's total olive oil exports. • These enterprises represent the most crucial segment of the value chain, deeply connected with exports and highly invested in the EU market. • The ongoing EU Trade agreement is widely considered unfair, primarily due to European control over importation licenses. This arrangement impedes the effective promotion of olive oil, including organic production. • Exporters advocate for a more open market that would enable them to export larger volumes of organic olive oil. • They express their willingness to invest in new technologies to enhance the sustainability of production. • These prominent enterprises have a global presence, exporting olive oil worldwide, and they adhere to various voluntary standards, such as the International Food Standard. • Olive oil exporters believe that the DCFTA agreement will have a positive impact on environmental sustainability. 	<p>The union's position on the DCFTA trade agreement is contingent on three key prerequisites: i) free movement of persons, ii) unrestricted olive oil exports, and iii) the inclusion of the textile sector in the agreement.</p> <ul style="list-style-type: none"> • The exporters' union believes that fostering free trade with the EU can have a positive impact on environmental sustainability by facilitating increased olive tree cultivation in the Sahara region, potentially mitigating desertification and benefiting the environment. • To combat desertification, their vision includes extensive olive tree planting in the Sahara region. • Olive oil is considered a common good with health benefits, and they advocate for its unrestricted trade with the EU.

		<ul style="list-style-type: none"> • They see the potential for product differentiation (conventional and organic olive oil) based on sustainable production methods as a result of the DCFTA agreement with the EU. 	
	International organization	Irrigation systems expert	Academic researcher
Stakeholders dealing with sustainability issues	<p>There is a concerning link between trade and sustainability, particularly regarding the impact of production intensification on water availability. It is imperative for the EU to implement measures that support a sustainable transition and climate change adaptation techniques, with a specific focus on providing new technologies to improve water use efficiency:</p> <ul style="list-style-type: none"> • Water scarcity is exacerbated by producers shifting away from traditional water-saving methods to high-input cultivation systems. • A negative correlation exists between trade activities and sustainability, primarily due to the intensification of production. • The EU should take proactive steps to facilitate a sustainable transition and climate change adaptation, especially by offering 	<p>The expansion of export opportunities holds significant potential for Tunisia's agricultural sector. This growth can provide the financial means needed to modernize production techniques and enhance adaptability:</p> <ul style="list-style-type: none"> • The expansion of the export market presents an opportunity for enterprises to secure financial resources for investing in new technologies. This investment is essential for adapting to and modernizing production processes and dealing with climate change at the same time. • It becomes evident that Tunisian production will increasingly depend on irrigation. There is a need to adopt new water-efficient irrigation technologies to sustain production volumes and ensure stable incomes for olive oil producers. 	<p>In the face of increasing drought challenges, irrigation technology plays a pivotal role in securing the sustainability of the olive oil sector. Nevertheless, the rising competition for water resources - human consumption versus agricultural needs - poses a growing disadvantage for the latter. To address this issue, new trade agreements should be complemented by advancements in water-efficient technologies aimed at optimizing water resource utilization:</p> <ul style="list-style-type: none"> • New technologies have the potential to combat drought challenges by enabling precise and on-demand irrigation. • Cisterns tracked by tractors offer a solution for a more efficient irrigation system. This irrigation method holds significant potential, as even basic implementation covering just 6% of the olive groves can yield an impressive 40% increase in olive oil production.

	advanced technologies to enhance water use efficiency.		<ul style="list-style-type: none"> • New trade agreements should incorporate advancements in water-use technology such as training programs, and extension services for producers. • Producers need training initiatives to learn about effective water-saving practices, ultimately contributing to increased production as well.
	Representative of the Minister's office (Ministry of Agriculture)	Directors of the Development and Production Departments (Ministry of Agriculture)	Director of the Organic Production Department (Ministry of Agriculture)
Policy-makers	<p>Environmental sustainability represents a priority for the olive oil sector, with a strong emphasis on product quality. Intensification in olive oil cultivation can have adverse environmental effects due to pressures on natural resources and greenhouse gas emissions. The Ministry of Agriculture supports organic certification through grants while also imposing restrictions on new water drilling for large-scale producers:</p> <ul style="list-style-type: none"> • Olive cultivation is sustainable, as it mainly relies on rainfed practices. • Small-scale producers use occasional irrigation in the field. • Minimal interventions, such as tillage and pruning operations, can contribute to 	<p>The landscape of olive cultivation is undergoing significant transformations to achieve sustainability. Evolving regulations and practices address environmental and resource concerns and adapt to challenges posed by climate change. Public investments in renewable energy, particularly solar power, and water efficiency improvements play a pivotal role in these efforts:</p> <ul style="list-style-type: none"> • Large industrial enterprises are prohibited from drilling new wells, promoting alternative water usage methods like drip irrigation to improve efficiency. • Margines, derived from olive pomace, can be used as sustainable fertilizers, instead of using chemicals. • Significant public investments are directed towards solar energy and water-use efficiency to mitigate the effects of climate change. 	<p>The future DCFTA trade agreement should actively promote and contribute to the advancement of organic production:</p> <ul style="list-style-type: none"> • The focus of the future DCFTA trade agreement should aim to enhance organic quotas in the EU market. • In this regard, EU support is essential in facilitating access to the market by eliminating expensive administrative procedures.

	<p>soil stabilization and reduce water needs.</p> <ul style="list-style-type: none"> • Olive oil intensification poses environmental challenges due to resource pressure and greenhouse gas emissions. • The Ministry of Agriculture provides grants to support organic certification among olive producers. • The Ministry enforces a ban on new water drilling for large-scale olive oil producers. 	<ul style="list-style-type: none"> • The future DCFTA trade agreement presents a significant opportunity for sustainability enhancements and investments to improve production while minimizing environmental impact. 	
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7. Conclusions

The problem with the liberalisation of agricultural trade is not limited to the poor upgrading of the sector in general but lies above all in the almost total asymmetry (natural and structural) between the two competing agricultural economies. The proposed DCFTA offers greater opportunities for integrating sustainable development considerations thanks to its broad regulatory scope of many economic sectors, including agriculture. However, the participation of all stakeholders, including civil society, is an essential part of the process. For the olive oil sector, the main risk of trade liberalisation lies in the need to intensify production processes, leading to strong pressure on resources (water) and marginalisation of small producers.

Based on a desk study and stakeholder interviews primarily focused on Tunisia's leading agricultural export, the olive oil sector, the results of the analysis indicate a need for policy interventions in the following key areas, which are presented below.

The current tariff quota system limits the potential of the olive oil sector, hindering production exports and value-added benefits. The current system imposes significant limitations on Tunisia's ability to export olive oil to the EU beyond the established quota limit. To overcome this, it is recommended that the tariff quota for imports into the EU should be either eliminated or substantially expanded. This would serve as a fundamental starting point for any strategies aimed at achieving a future DCFTA.



It is of utmost importance not only to increase the overall volume of exports but also to enhance the proportion of higher-value and processed export products. Despite the primary destination being the EU for olive oil exports, a significant challenge arises from the fact that EU importers predominantly purchase Tunisian olive oil in bulk and blend it with European oils, severely limiting Tunisia's ability to add value. Additionally, the export of bottled and branded products to the EU faces challenges due to a lack of consumer awareness regarding Tunisian olive oil. This is partly due to restrictions on labelling Tunisian origin in mixed products: EU regulation N. 29/2012 allows European olive oil manufacturers to label bottles containing Tunisian olive oil as '*not of European origin*'. Eliminating the quota would not only facilitate increased bulk exports to the EU but also substantially enhance exports of bottled and branded Tunisian olive oil to the EU.

Boosting the share of bottled and branded exports is pivotal to enhancing the value added in Tunisia's olive oil sector and reducing income volatility, as high-value olive oil products typically demonstrate lower price volatility compared to lower-value olive oil. Tunisian exporting companies, especially the largest ones, already have the capabilities and capacity to produce competitive and marketable bottled and branded products. Nonetheless, there is significant potential for increasing consumer awareness of Tunisian olive oil and Tunisian brands in both traditional markets (e.g., Spain and Italy) and emerging markets (e.g., the USA, Canada, and Japan) through targeted and comprehensive marketing efforts. The promotion of bottled and branded olive oil products should be complemented by the broader utilization of geographical indications, organic certification systems, and the implementation of technical standards to enhance the overall quality of Tunisian olive oil. It is advisable for the government and exporting companies to collaborate on developing a comprehensive national branding strategy. If this is managed correctly, given the rising demand among European consumers for organically grown and sustainably harvested food products, it might foster the adoption of more sustainable production models. In this regard, the envisaged DCFTA could also facilitate the upgrading of the olive oil sector by supporting compliance with standards, including both sanitary and phytosanitary standards (SPS) and the private quality certifications set by lead firms in the Global Value Chain, especially concerning certifications for organic and sustainable products.

In Tunisia, the impact of climate change is evident through diminishing arable land and water resources, coupled with a decrease in the profitability of various farming activities. In response to the ongoing challenges posed by climate change and a rising incidence of drought, the Tunisian government recently enforced restrictions on irrigated agriculture in specific regions.



However, the Tunisian government should look beyond temporary irrigation bans and instead, consider a fundamental transformation of its agricultural and food trade model.

In this context, smallholder farmers can play a crucial role. Recent studies have questioned the assumption that large-scale farms are more efficient and have proven that smallholder farmers are economically more profitable than their larger counterparts. These studies have also shown the important role smallholder farmers play in reducing poverty and unemployment, as well as their ability to cope with climate change conditions. It is therefore key to revive and support small and medium-sized family farming through the redirection of public policies towards this form of agriculture.

For the olive oil value chain, this entails restraining the expansion of olive cultivation areas under monoculture, phasing out intensive irrigated olive farming, promoting the export of domestically processed olive oil, and encouraging increased local consumption to reduce reliance on imported vegetable oils. However, this strategy should be underpinned by increased efforts to advocate for sustainable agricultural practices and investments, particularly in water-efficient methods. These efforts should be complemented by investments in the recycling of wastewater at the national level. Enhancing irrigation practices to minimize water requirements and recycle wastewater is crucial in addressing water scarcity.

Tunisia is currently characterized by an ongoing process of consolidating its democracy within a complex regional context; therefore, the current negotiations should prioritize the establishment of stable economic growth and the preservation of social and territorial cohesion, including support for its rural regions.

In this context, the European Union's role should continue to concentrate on areas where cooperation can provide the greatest benefits to the olive oil industry:

- Promoting the adoption of water-efficient practices and the recycling of wastewater, including conducting context-specific research studies that involve collaboration with small olive oil farmers.
- Supporting the government in reducing environmental impacts by encouraging the adoption of more sustainable cultivation methods, such as organic farming.
- Facilitating horizontal integration by fostering the creation of farmer-based organizations, such as cooperatives. These organizations can also serve as opportunities to enhance productivity within the Tunisian olive oil sector.
- Expanding extension services, improving access to financial services, and encouraging contract farming in rural areas.

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- Developing an inclusive value chain by establishing connections among various stakeholders (e.g., millers, exporters). This can lead to positive impacts on productivity and the quality standards of olive oil production.

The DCFTA negotiations between Tunisia and the EU present an opportunity not only to enhance market access for Tunisian olive oil in the EU but also to implement a comprehensive upgrading plan for the olive oil sector, which could generate spillover effects that benefit Tunisia's economy overall. This is crucial for aligning the economic development of Tunisia with the SDGs promoted by the UN.

References

- Abdallah, S. B., Elfkih, S., Suárez-Rey, E. M., Parra-López, C., & Romero-Gámez, M. (2021). Evaluation of the environmental sustainability in the olive growing systems in Tunisia. *Journal of Cleaner Production*, 282, 124526.
- AGFORWARD (2017). Olive trees intercropped with cereals and legumes. Available at: https://euraf.isa.utl.pt/files/pub/21_olive_trees_intercropped_with_cereals_and_legumes.pdf.
- ALECA (2019). Rapport conjoint du quatrième round de négociation sur un accord de libre-échange complet et approfondi (ALECA) entre la Tunisie et l'Union européenne. Tunis, le 3 mai 2019.
- Ballet, J., Kouamékan J., Koffi M., & Boniface K. (2009). Co-management of natural resources in developing countries: The importance of context. *Économie internationale*, 120, 53-76.
- Ben Rouine C. (2018), Bilan du soutien européen temporaire aux exportations d'huile d'olive tunisienne, Tunisian Observatory of Economy, Briefing Paper No. 5, Tunis.
- Ben Rouine, C., and Chandoul, J. (2019). ALECA et agriculture: Au-delà des barrières tarifaires. Report on behalf of Rosa Luxemburg Stiftung and the Tunisian Union of Agriculture and Fisheries. Tunis: RLS North Africa.
- Bied-Charreton, M., Makkaoui, R., Petit, O. & Requier-Desjardins, M. (2006). La gouvernance des ressources en eau dans les pays en développement: enjeux nationaux et globaux. *Mondes en développement* 34, 3-135.
- Boussadia, O., Omri, A., & Mzid, N. (2023). Eco-Physiological Behavior of Five Tunisian Olive Tree Cultivars under Drought Stress. *Agronomy*, 13, 720.
- Canale, M., Bernardo, U., Milonas, P., & Santos, S. (2019). *Biological and Biotechnical methods for olive pests control*. EIP-AGRI Focus Group 'Pests and diseases of the olive tree'. EIP-AGR, Agriculture & Innovation.
- Chebil, A., Frija, A., Makhoul, M., Thabet, C., & Jebari, S. (2019). Effects of water scarcity on the performances of the agricultural sector and adaptation strategies in Tunisia in *Agricultural Economics Current Issues*. DOI: 10.5772/intechopen.83568
- Chehab, H., Tekaya, M., Ouhibi, M., Gouiaa, M., Zakhama, H., Mahjoub, Z., Laamari, S., Sfina, H., Chihaoui, B., Boujnah, D. & Mechri, B. (2019). *Scientia Horticulturae*, 253 (27), 163-171.

- CREA (2019). *Annuario dell'agricoltura italiana 2017*. Vol. LXXI. CREA Consiglio per la Ricerca in Agricoltura e l'Analisi dell'Economia Agraria, Centro di ricerca Politiche e Bio-economia, Roma, pp. 191-192.
- DGPA, 2020. *Ministere de l'Agriculture et des Ressources Hydrauliques de la Tunisie - DGPA (Direction Générale de la Production Agricole) - Biobase, base de données documentaire en AB. Available at: https://abiodoc.docressources.fr/index.php?lvl=publisher_see&id=2268*.
- Donner, M., Radi'c, I., Erraach, Y., & El Hadad-Gauthier, F. (2022). Implementation of Circular Business Models for Olive Oil Waste and By-Product Valorization. *Resources*, 11, 68.
- Dorte Verner et al., *Climate Variability, Drought, and Drought Management in Tunisia's Agricultural Sector* (Washington, D.C.: World Bank, October 2018), 27.
- ECORYS (2013): *Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Tunisia – Final Report*. Rotterdam.
- Elfkih, S., Sahnoun, H., Ameer, W., Abdallah, S. B., & Albouchi, L. (2022). Organic olive growing farms' sustainability assessment: the Tunisian case. *Euro-Mediterranean Journal for Environmental Integration*, 1-17
- Elfkih, S.; Hadiji, O.; Ben Abdallah, S.; Boussadia, O. Water Accounting for Food Security: Virtual Water and Water Productivity in the Case of Tunisian Olive Oil Value Chain. *Agriculture* 2023, 13, 1205. <https://doi.org/10.3390/agriculture13061205>
- European Commission. (1997). *Report from the Commission to the Council: Mediterranean concessions impact study*. Bruxelles.
- European Commission. (2023, October 3). *Market situation for olive oil and table olives*. https://agriculture.ec.europa.eu/data-and-analysis/markets/price-data/price-monitoring-sector/olive-oil_en
- European Union (2016a). Ue – Tunisie. Accord de libre-échange complet et approfondi (ALECA). Libéralisation des échanges: paramètres de négociation. Version du 26/04/2016.
- European Union (2016b). *Handbook for trade sustainability impact assessment*. Second edition. Luxembourg.
- FAO, 2015. *Tunisie: Analyse de la filière oléicole*. FAO Investment Center, Rome.
- Fernández-Lobato, L., López-Sánchez, Y., Baccar, R., Fendri, M., & Vera, D. (2022). Life cycle assessment of the most representative virgin olive oil production systems in Tunisia. *Sustainable Production and Consumption*, 32, 908-923.
- Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data

- saturation for theory-based interview studies. *Psychology and health*, 25(10), 1229-1245.
- FTDES, CNC-D-11.11.11, ITCM Mena, Euromedrights, TNI (2018). EU-Tunisia DCFTA. 1 May 2018
- Gasiorek, M. and Mouley, S. (2019). Analyzing the impact of an EU-Tunisia DCFTA on Tunisian trade and production, FEMISE Research Papers, Report FEM43-16.
- Ghesquiere, H. (2001). The Impact of European Union Association Agreements on Mediterranean Countries. In Zubair Iqbal (ed), *Macroeconomic Issues and Policies in the Middle East and North Africa*, International Monetary Fund.
- GIZ (2019). Liberalising agricultural trade between the EU and Tunisia. Analysis of trade relations and recommendations for the negotiation of a new trade agreement. Sector project “Agricultural Trade, Agribusiness, Agricultural Finance”, Policy Brief n. 5, Germany.
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge.
- Grumiller, J., Raza, W. G., Staritz, C., Tröster, B., Von Arnim, R., & Grohs, H. (2018a). The economic and social effects of the EU Free Trade Agreement (DCFTA) with Tunisia (No. 9/2018). Research Report.
- Grumiller, J., Grohs, H., Raza, W., Staritz, C., Tröster, B., (2018b). Strategies for sustainable upgrading in global value chains: the Tunisian olive oil sector, ÖFSE Research Report 26, Vienna.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: how many interviews are enough? *Qualitative health research*, 27(4), 591-608.
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social science & medicine*, 292, 114523.
- ILO (2010). *World Social Security Report 2010/11*. International Labour Office, Geneva.
- International Olive Council. (2022, 01 27). *World Trade in Olive Oil*. Retrieved from: <https://www.internationaloliveoil.org/world-trade-in-olive-oil-2/>
- Jbili, A. and Enders, K. (1996). The Association Agreement Between Tunisia and the European Union. *Finance & Development*, September, pp. 18-20.
- Jouili, M. (2023). *Olive Oil and Water: Moving towards sustainable agricultural trade between the EU and Tunisia*, Issue Brief n.1, Amsterdam.

- Lannon, E. (2014,). An Economic Response to the Crisis: Towards a New Generation of Deep and Comprehensive Free Trade Areas with the Mediterranean Partner Countries. In European Parliament, Policy Department Workshop: The Euromed Region after the Arab Spring and the New Generation of DCFTAs (pp. 37-61). Retrieved from [http://www.europarl.europa.eu/RegData/etudes/workshop40/join/2014/433756/EXPO-INTA_AT\(2014\)433756_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/workshop40/join/2014/433756/EXPO-INTA_AT(2014)433756_EN.pdf).
- Larbi, A., Msallem, M., & Sai, M.B. (2017). *L'intensification des oliviers en Tunisie: les avantages, les problemes et les perspectives*. Olive Tree Institute (IO), Tunisia.
- Lejmi, M. (2021). EU-Tunisia Deep and Complete Free Trade Agreement (DCFTA) Analysing Standards Harmonisation Challenges, and Opportunities.
- Lejmi, L., (2020). L'accord de libre-échange complet et approfondi (ALECA) et la sécurisation del'espace euro-méditerranéen: le cas de la Tunisie. HAL Open Science. dumas-03441003.
- Letseku, V.; Grové, B. Crop Water Productivity, Applied Water Productivity and Economic Decision Making. *Water* 2022, 14, 1598.
- MA (2018). Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche, Bureau de la Planification et des Equilibres Hydrauliques. Rapport National du Secteur de l'Eau. Available at: http://www.onagri.nat.tn/uploads/Etudes/Revue_2020_final.pdf.
- MA (2022). Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche, Bureau de la Planification et des Equilibres Hydrauliques. Rapport National du Secteur de l'Eau. Elaboration du Plan Directeur National de Réutilisation des Eaux Usées Traitées en Tunisie – WATER REUSE 2050: prospective de la filière à l'horizon 2050. Available at: <https://onagrihome.files.wordpress.com/2022/07/2.-rapport-phase-2-prospectives.pdf>.
- Nasri, K., Amara, M. and Helmi I. (2022). The Landscape of Social Protection in Tunisia. ERF, Working paper n. 1592.
- OECD (2010). Guidance on Sustainability Impact Assessment. OECD, Paris.
- Radhouane, P.L., 2018. Why don't adapt Tunisian agriculture to climate change? *International Journal of Science, Environment and Technology*, 7(5), 1542–1562.
- Raza, W.G., Tröster, B., von Arnim, R., Chandoul, J., Ben Rouine, C. (2022). Regulatory approximation under ALECA: Assessing the economic and social effects on the Tunisian agricultural sector. Research Report, No. 15/2022, Austrian Foundation for Development Research (ÖFSE), Vienna.

- Rochdane S, Bounoua L, Zhang P, Imhoff ML, Messouli M, Yacoubi- Khebiza M (2014). Combining satellite data and models to assess vulnerability to climate change and its impact on food security in Morocco. *Sustainability*, 6 (4): 1729-1746.
- Rudloff, B. (2020). A Stable Countryside for a Stable Country? The Effects of a DCFTA with the EU on Tunisian Agriculture. SWP Research Paper 2, January. Berlin.
- Rudloff, B. and Werenfels, I. (2018). EU-Tunisia DCFTA: Good Intentions Not Enough. SWP Comment No 49. November. Berlin.
- Soula, R., Chebil, A., McCann, L., & Majdoub, R. (2021). Water scarcity in the Mahdia region of Tunisia: Are improved water policies needed? *Groundwater for Sustainable Development*, 12, 100510.
- Sghaier, A., Dhaou, H. ., Jarray, L. ., Abaab, Z., Sekrafi, A. and Ouessar, M. . (2022) “Assessment of drought stress in arid olive groves using HidroMORE model”, *Journal of Agricultural Engineering*, 53(1). doi: 10.4081/jae.2022.1264.
- Tröster, B, Raza, W., Grohs, H., Grumiller, J., Staritz, C., von Arnim, R. (2018). The EU-Tunisia Deep and Comprehensive Free Trade Area (DCFTA): macroeconomic impacts and pro-developmental policy responses. Policy Note, No. 28/2018, Austrian Foundation for Development Research (ÖFSE), Vienna.
- UNDP, (2022). UNDP popularizes Tunisian underground irrigation technology in the Aral Sea region. Available at: <https://www.undp.org/uzbekistan/press-releases/undp-popularizes-tunisian-underground-irrigation-technology-aral-sea-region>.
- Vernoux, J. F., Jarraya, H. F., & Ghoudi, R. (2020). Numerical groundwater flow modelling for managing the Gabes Jeffara aquifer system (Tunisia) about oasis ecosystems. *Hydrogeology Journal*, 28(3), 1077-1090.

Appendix

A. Interview questions

1. Functioning and main challenges in the olive oil value chain
2. Opinion on the olive oil production sustainability (economic, social and environmental)
3. International market requirements (volumes, prices and certifications)
4. Organic olive oil market and evolution
5. The EU-Tunisia current agreement and the next round of DCFTA discussions
6. The link between Trade and sustainability

B. Other trade agreement provisions and SDG linkages: lessons learned

B.1 Labour provisions

Labour provision in trade agreements is considered an SDG vehicle and accelerator. It has a role in alleviating poverty (SDG 1), improving education (SDG 4), ensuring decent work, and economic growth (SDG 8), and reducing inequalities (SDG 10).

Labour provisions are obligations in trade agreements to protect and advance workers' rights, including through different forms of cooperation and dialogue between trade unions, business organizations and the general public. Around half of trade agreements concluded in the last decade (2011-2020), contained labour provisions, compared to only 22% in the previous decade (2001-2010). The International Labour Organization (ILO) has launched a new global database on trade agreements containing labour provisions, paving the way for a more human-centred approach to trade policy⁹⁹.

Tunisia has recently officially adopted the Sustainable Development Goals (SDGs) promoted by the United Nations General Assembly in September 2015. Tunisia is ranked first in Africa out of 52 countries in the field of achieving SDGs¹⁰⁰. The achievement rate reached 67.1% against the average of the rest of the African countries of 53.8%.

Before the 2010 revolution Tunisia was seen as a pioneer of human rights and equality in North Africa. The Tunisian constitution adopted in 2014 explicitly grants equal rights to women and men. Tunisia has also ratified all eight core labour standards of the ILO.

⁹⁹ https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_835844/lang--en/index.htm

¹⁰⁰ According to the latest report published by the Center for Sustainable Development Goals for Africa in 2020.

Political participation by women is strong. At the last parliamentary election, seventy women were elected (30% of the seats), a higher proportion than in the parliaments of France, the United Kingdom or the United States (Rudloff, 2020). In reality, however, discrimination is still widespread, in part because it is rooted in traditional and religious gender roles. The proportion of women in the agricultural sector has fallen since 2006, from 20% to 11%. However, women are frequently missed by the statistics because they often work as domestics or seasonal workers. It is estimated that women make up 90 per cent of the workforce involved in the olive harvest. The poor contractual conditions prevalent for seasonal work are another reason why women earn less than men. It is also considerably more difficult for women to access financial services or land; they own less agricultural land and are still disadvantaged in inheritance law.

B.2 Environmental provisions

In terms of ecological challenges, the World Bank estimated the overall cost of environmental degradation in Tunisia to be 2.1% of GDP (2004). The principal problems encountered were “*water-related diseases resulting from lack of sanitation in rural areas*” and increasing salt concentration recorded in soil and groundwater (Rudloff, 2020).

Climate challenges and water shortage Climate changes put further pressure on the scarce agricultural resources in Tunisia (e.g. agricultural land), already characterized by low agricultural productivity and lack of other sources of income, often leading to overexploitation of natural resources. Moreover, drought resulting from climate change would further increase the pressure on already over-pumped aquifers if farmers are forced to rely on groundwater in the absence of surface water. This, along with many other factors (population growth, agricultural and industrial expansion, and poor water management) could contribute to worsening the fundamental scarcity of water (Rudloff, 2020).



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