



Ex post evaluation of the implementation of the Trade Agreement between the EU and its Member States and Colombia, Peru and Ecuador

Final Report – Vol. III: Case Studies

January 2022

Prepared by BKP Economic Advisors

The views expressed in the report are those of the consultant, and do not present an official view of the European Commission.



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CASE STUDY 1 – IMPACT OF THE AGREEMENT ON TOURISM

1 INTRODUCTION

The purpose of this case study is to analyse to what extent and how the Agreement has led to increased EU FDI in the tourism sector (hotels, travel companies, restaurants) in the three Andean partner countries.

The analysis starts with a situational review of tourism sector performance in the three countries and the importance and evolution of EU FDI in the sector (section 2). Section 3 then assesses the impact of the Agreement on EU FDI in the sector by reviewing the sectoral commitments made by the partners, and analysing changes in investment trends as well as stakeholder contributions. Section 4 concludes.

2 SITUATIONAL ANALYSIS: EU INVESTMENT AND DEMAND FOR TOURISM IN COLOMBIA, ECUADOR AND PERU

2.1 EU-Andean Tourism

The tourism industry accounts for a sizable share of the three partner countries' economies – about 2% in the period 2015-2019 (Figure 1); but with different trends: stagnation in Peru, and increases in Colombia and Ecuador. This increase in economic importance in Colombia is also reflected in the increasing number of tourism establishments, which almost doubled in the period, from 22,000 to 43,000 (Figure 2). Conversely, in Ecuador the number of establishments hardly changed, while in Peru it increased slowly. In this context, it should be noted that the average size of establishments in Ecuador is substantially smaller than in the two other countries.

Figure 1: Share of inbound tourism expenditure in Andean partner countries' GDP, 2015-2019

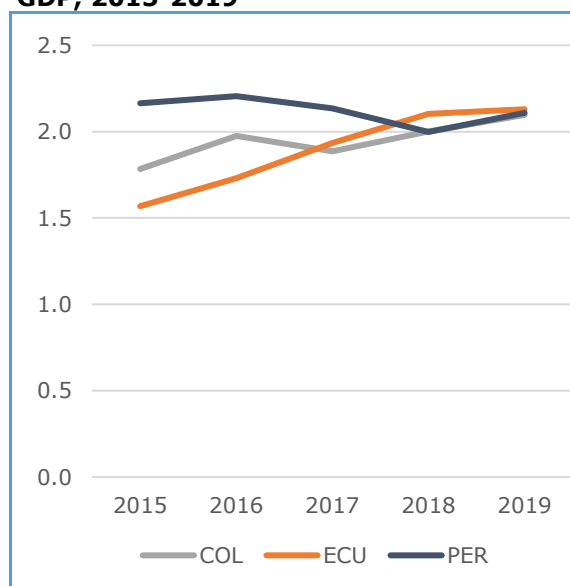
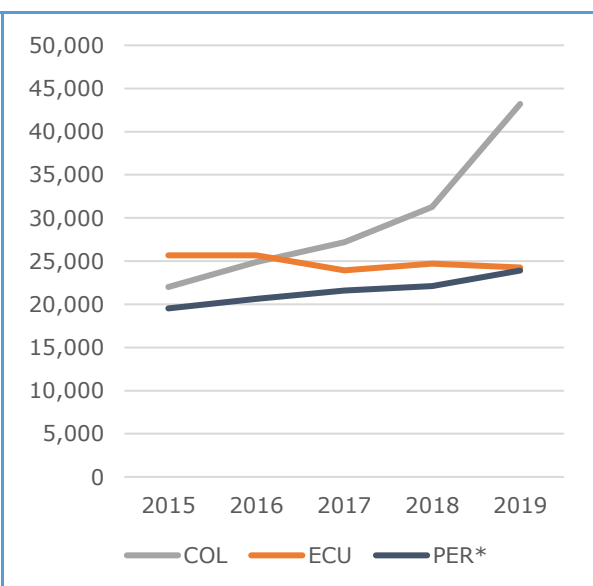


Figure 2: Total number of tourism establishments in Andean partner countries, 2015-2019

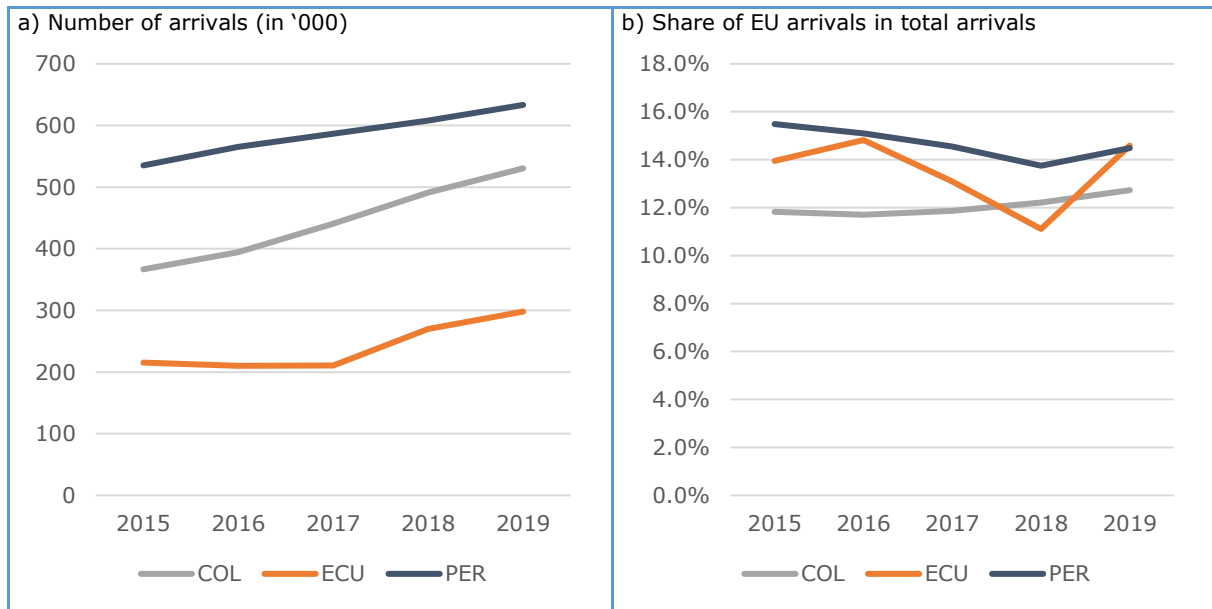


* Hotels and similar establishments only

Source: Authors' calculations based on World Tourism Association (2020), Compendium of Tourism Statistics dataset [Electronic], UNWTO, Madrid, data updated on 03/12/2020.

The number of EU visitors to the three Andean partner countries increased in the period 2015 to 2019.¹ For Colombia and Peru, the increase was constant, year on year, and for Ecuador the increase started in 2018, i.e. the year after the Agreement started to be applied for the country (Figure 3a). However, as total visitor arrivals also increased in the three countries, the share of EU visitor arrivals in total arrivals remained almost constant over the period 2015 to 2019 (Figure 3b).

Figure 3: Arrivals of EU28 nationals in Andean partner countries, 2015-2019



Source: Authors' calculations based on World Tourism Association (2020), Compendium of Tourism Statistics dataset [Electronic], UNWTO, Madrid, data updated on 03/12/2020.

2.2 EU Investment in Partner Country Tourism Sectors

Official statistics on bilateral investment in the tourism sector are limited. In Ecuador, the central bank provides sectoral FDI data by country of investor over time, but tourism is not separately listed; for Peru, detailed data are available only for 2020;² and for Colombia not at all.

In **Colombia**, total FDI inflows in the tourism sector (approximated by the trade, hotels and restaurants sector) has been volatile over the period 2007 to 2020, fluctuating between USD 300 million and USD 2.4 billion (Figure 4). No clear trend is evident. Comparing the six years before the start of application of the Agreement (2007-2012) with the six years after (2014-2020) shows that average annual investments hardly changed (from USD 1.08 billion to USD 1.13 billion), but given that total FDI inflows increased more, the sector's share decreased from 16% to 11% (Figure 5). However, the share of EU investment in total FDI could not be determined.

¹ For obvious reasons, arrivals dropped precipitously in 2020 (and have not yet recovered in 2021), but this extraordinary development would distort the trend analysis; accordingly, we report data until 2019. Latest data can be obtained from the official tourism data portals, i.e. for Colombia: <https://www.citur.gov.co/>; for Ecuador: <https://servicios.turismo.gob.ec/>; and for Peru: <https://www.promperu.gob.pe/TurismoIN/>

² Peru maintains two main official sources of foreign investment statistics: the statistics provided by the Central bank and those provided by the Investment Promotion Agency – ProInversión. The information published by ProInversión corresponds to the investments reported on a voluntary basis by investors to the Foreign Investment Registry system.

Figure 4: Tourism FDI flows to Colombia, 2007-2020 (USD million)

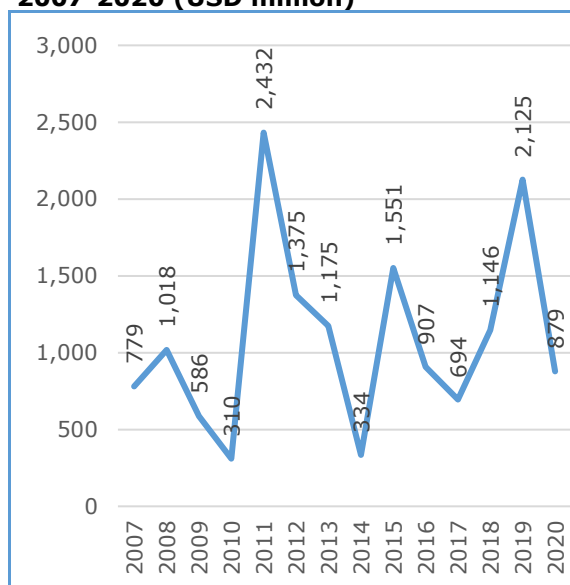
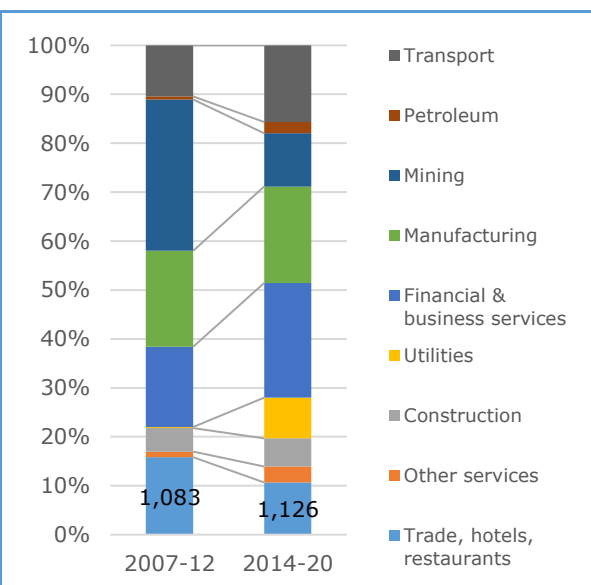


Figure 5: Sectoral composition of FDI flows into Colombia, 2014-20 vs. 2007-12 (% and USD million per year)



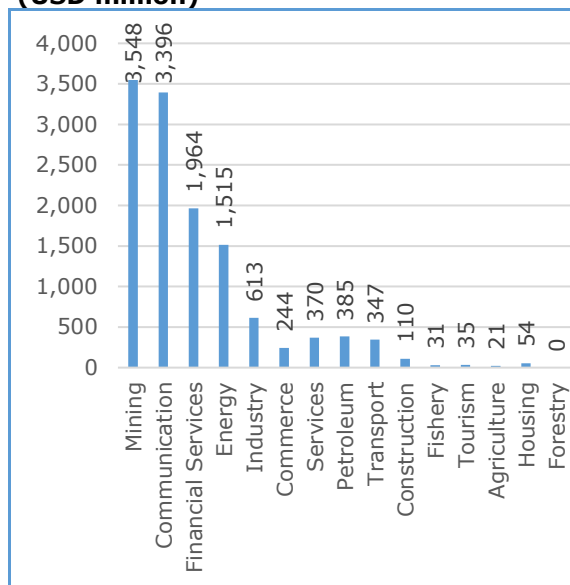
Source: CITUR, https://www.citur.gov.co/estadisticas/df_invers_extranj/all/22#qsc.tab=0 [accessed 01 August 2021]

The data for **Peru** show that EU investment in the tourism sector plays a limited role. The FDI stock in the sector in 2020 amounted to USD 35 million, according to data by ProInversión (Figure 6). This accounts for about 41% of the total FDI stock in the sector in Peru (USD 83 million), which is less than the EU's share in overall FDI (47%). In terms of the share of EU investment in Peru among the 15 sectors which the ProInversión data distinguish, tourism ranks 12th, accounting for 0.3% of total EU FDI in the country (USD 35 million out of USD 12.6 billion); the value of FDI stocks were lower only (somewhat surprisingly) in fishery (USD 31 million), agriculture (USD 21 million) and forestry (zero). Also, ProInversión's list of important foreign investors for the years 2011 to 2020 includes no EU investor in the tourism sector.

For **Ecuador**, EU FDI inflows since the start of application of the Agreement have altered substantially across sectors (Figure 7); but it could not be identified in which sector tourism services would fall. Conversely, the Ministry of Tourism provides information about FDI in the sector based on contracts signed, but not broken down by source country. According to these data, investment in the tourism sector increased from USD 28.2 million in 2018 to USD 200.9 million in 2020, with data for the first half of 2021 (USD 24.4 million) indicating a sharp decline.³

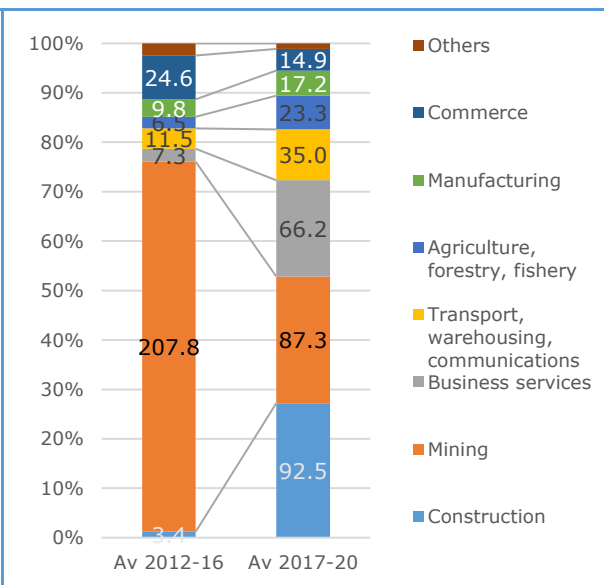
³ <https://servicios.turismo.gob.ec/visualizador-inversiones> [accessed 01 August 2021].

Figure 6: EU FDI in Peru by sector, 2020 (USD million)



Source: Authors' calculations based on Dirección de Servicios al Inversionista – PROINVERSIÓN.

Figure 7: Sectoral composition of EU FDI flows into Ecuador, 2017-20 vs. 2012-16 (% and USD million per year)



Source: Authors' calculations based on Banco Central de Ecuador.

2.3 Policies to support investment in the tourism sector

All of the three Andean partner countries consider the tourism sector to be of strategic importance.

In **Colombia**, tourism is one of the Government's priority sectors for investment.⁴ Among the decrees that promote economic reactivation post-covid-19 is the Decree for Special Tourism Projects (PTE), developed as an instrument to develop large-scale tourism initiatives throughout the country, in an attempt to diversify the country's tourism product. Projects will be supported in areas that have the potential to gain strategic importance for the development or improvement of the Colombian tourism offer, due to geographical location and connectivity facilities, in addition to having cultural, environmental and social value. Opportunities in ecotourism and agrotourism are promoted. Examples include the department of Guainía or in the Coffee Cultural Landscape, cultural tours, such as "La Ruta de Macondo" in honour of Gabriel García Márquez; whale or bird watching; and various destinations for business tourism.

Tourism policies in **Peru** aim at expanding the tourism infrastructure, including through public investment projects, many of which channelled through the Plan COPESCO Nacional, and at formalising the tourism industry.⁵ In addition, in response to the heavy impact which covid-19 has had on the industry, the Ministry of External Trade and Tourism in February 2021 launched a 3-year national strategy for the reactivation of tourism.⁶

In **Ecuador**, the Ministry of Tourism launched a programme "Invest Ecuador Tourism" in 2014, with the aim of improving the business climate in the tourism sector. This also

⁴ "Colombia, una seductora inversión en turismo", ProColombia, 30 December 2020, <https://investincolombia.com.co/es/articulos-y-herramientas/articulos/colombia-una-seductora-inversion-en-turismo>

⁵ Plan para la Formalización del Sector Turismo, available at <https://www.mincetur.gob.pe/turismo/proyectos-en-turismo/plan-de-apoyo-a-la-formalizacion-del-sector-turismo/>

⁶ "Mincetur presenta Estrategia Nacional para la reactivación del Sector Turismo", 22 February 2021, <https://www.gob.pe/institucion/mincetur/noticias/343484-mincetur-presenta-estrategia-nacional-para-la-reactivacion-del-sector-turismo>

provides information and investment opportunities in the sector, including on dedicated websites.⁷ Currently, a new tourism law is under development to replace the 2002 one currently in place.⁸

None of the identified strategies and initiatives specifically targets EU investors, and no link is made to the Agreement.

3 IMPACT ASSESSMENT: HOW THE AGREEMENT HAS INFLUENCED EU INVESTMENT IN THE COLOMBIAN, ECUADORIAN AND PERUVIAN TOURISM INDUSTRIES

3.1 Provisions in the Agreement on Investment in the Tourism Sector

Under the Agreement, the Andean partner countries remove most limitations for investment by EU investors across all three sub-sectors (Table 1). Nevertheless, these de facto provide no WTO-Plus commitments, i.e. they do not go beyond the commitments already made under the WTO, except for tourist guide services.

The Agreement thus provides few direct preferences that would incentivise EU businesses to invest in the partner countries' tourism sector. At the same time, the horizontal provisions on establishment, services trade and governance could have a positive influence on the investment decisions by potential EU investors.

3.2 Investment Effects of the Agreement

As mentioned above, FDI data disaggregated by sector and source country are scant, and the few data that are available do not indicate any increase in EU investment in the sector since the Agreement started to be applied.

No EU investors in the sector could be interviewed; however, among those EU investors and other representatives of EU business interests in the Andean partner countries that were consulted, none confirmed that investment decisions had been influenced by the Agreement.

⁷ <https://investecuatoritourism.com>; additional information is available at: <https://servicios.turismo.gob.ec/>

⁸ "Ecuador quiere construir la ley de turismo más moderna de Latinoamérica", Edición LatAm, 05 July 2021, <https://www.hosteltur.com/lat/145273-ecuador-quiere-construir-la-ley-de-turismo-mas-moderna-de-latinoamerica.html>

Table 1: Commitments on establishment in the tourism sector made by Andean partner countries and limitations under WTO Mode 3 commitments

Country	Tourism sub-sector	Reservations for EU investment (Agreement)	Market access limitations (WTO)	National treatment limitations (WTO)
Colombia	Hotel, Restaurants & Catering (CPC 641, 642, 643)	None, except: Market Access CPC 642, 643: Note 1; national treatment CPC 642, 643: Note 1, 2, 3	None	None
	Travel Agencies and Tour Operators Services (CPC 7471)	None	None	None
	Tourist Guide Services (CPC 7472)	None, except: Market Access: Note 1; national treatment: Note 1, 2, 3	Unbound	Unbound
Peru	Hotel, Restaurants & Catering (CPC 641, 642, 643)	None, except note 1 and (other) horizontal restrictions	Operating license from DG Tourism required	None
	Travel Agencies and Tour Operators Services (CPC 7471)	None, except note 1 and (other) horizontal restrictions	Registration and bond required	None
	Tourist Guide Services (CPC 7472)	None, except note 1 and (other) horizontal restrictions	Unbound	Unbound
Ecuador	Hotel, Restaurants & Catering (CPC 641, 642, 643)	None, except horizontal restrictions	None	None
	Travel Agencies and Tour Operators Services (CPC 7471)	None, except horizontal restrictions	None	None
	Tourist Guide Services (CPC 7472)	None, except horizontal restrictions	Unbound	Unbound

Note number 1: Colombia and Peru reserve the right to adopt or maintain any measure according rights or preferences to socially or economically disadvantaged minorities and ethnic groups.

Note number 2: Colombia reserves the right to adopt or maintain any measure according rights or preferences to local communities with respect to the support and development of expressions relating to intangible cultural patrimony declared pursuant to Resolución No. 0168 de 2005

Note number 3: If the Colombian State decides to sell all or part of its interest in an enterprise to a person other than a Colombian state enterprise or other Colombian government entity, it shall first offer such interest exclusively, and under the conditions established in articles 3 and 11 of Ley 226 de 1995, to: (a) current, pensioned, and former employees (other than former employees terminated for just cause) of the enterprise and of other enterprises owned or controlled by the enterprise; (b) associations of employees and former employees of the enterprise; (c) employee unions; (d) federations and confederations of trade unions; (e) employee funds ('fondos de empleados'); (f) pension and severance funds; and (g) cooperative entities. However, once such interest has been transferred or sold, Colombia does not reserve the right to control any subsequent transfer or other disposal of such interest.

Source: Text of the Agreement and WTO I-TIP database.

4 CONCLUSIONS

No major impact of the Agreement on EU investments in the Andean partners' tourism sectors could be identified. Statistics do not point to any change in trends in EU-Andean travel. Also, interviewed stakeholders considered that the Agreement had no impact on EU investment in the Andean partner countries in general.

This should not be surprising, as the Agreement hardly changed the conditions for investment in the sector in the partner countries; nor has the implementation of the Agreement prioritised the sector or addressed investment or services trade issues in general. Conversely domestic policies in the Andean partner countries have remained unconnected with the Agreement, and no efforts have been made at strategic level to capitalise from it.

CASE STUDY 2 – IMPLEMENTATION OF THE AGREEMENT’S GOVERNMENT PROCUREMENT PROVISIONS IN COLOMBIA

1 INTRODUCTION

Under the Agreement, Colombia, Peru and Ecuador commit to provide EU companies, goods and services non-discriminatory access to the procurement of local municipalities in addition to that of central authorities above the pre-determined financial thresholds, within the scope of covered procurement as defined in the market access commitments of Colombia, Peru and Ecuador. In turn, Colombian, Peruvian and Ecuadorians bidders are granted access to the procurement of EU central and sub-central authorities (Annex XII, Appendix 1). In 2017, the EU and Colombia also signed a decision on Government Procurement, which further clarified the coverage of Colombia at the sub-central level in Colombia. However, at the Trade Committee meeting in December 2018 the EU raised the issue of lack of national treatment in some government procurement procedures carried out at local level in utilities fields.

In initial stakeholder consultations during the inception phase, the evaluation team was informed that some procuring entities in Colombia especially at sub-central level and in the utilities sectors might not be fully aware of the obligations under the Agreement and as a result thereof, and possibly of other factors, national treatment might be denied. Further consultations and research revealed a number of other issues that EU stakeholders had regarding government procurement in Colombia.

This case study therefore seeks to identify to what extent government procurement in Colombia has been opened up in practice for EU businesses at all levels, and which issues and problems have been encountered. Section 2 provides a short overview of government procurement in Colombia, and section 3 of the government procurement provisions in the Agreement. Section 4 discusses a number of implementation issues that have been raised by stakeholders, while section 5 addresses the outcome level, i.e. the level of participation of EU companies in Colombia’s government procurement markets since 2017 (earlier data are not readily available) in order to estimate the impact which the issues raised by stakeholders may had. Section 6 concludes.

2 GOVERNMENT PROCUREMENT IN COLOMBIA – AN OVERVIEW

Rules for government procurement in Colombia are spread over a number of laws and regulations. Table 1 lists key regulations.

Table 1: Colombian key regulations regarding government procurement

Regulations	Title
Law 80 of 1993	By which the General Contracting Statute of the Public Administration is issued. Its objective is to establish the rules and principles that govern the contracts of state entities.
Law 1150 of 2007	Through which measures for efficiency and transparency are introduced in Law 80 of 1993, and other general provisions are issued on contracting with Public Resources.
Law 1508 of 2012	By which the legal regime of Public-Private Associations is established, organic budget regulations are issued and other provisions are issued. Regulated by Decree 1467 of 2012.
Decree 4170 of 2011	By which the National Public Procurement Agency - Colombia Compra Eficiente - is created, its objectives and structure are determined.
Decree 1510 of 2013	Through which the public procurement and contracting system is regulated. Its objective is for state entities to achieve the objectives of the public procurement and contracting system defined by Colombia Compra Eficiente.
Decree 1082 of 2015	Through which a unitary regulatory decree for the National Administrative Planning Sector is issued.

Source: Own preparation

Government procurement procedures are also changing over time, with the aim of enhancing transparency and efficiency. Within the National Development Plan 2018-2022¹ and in relation to government procurement, the following strategies and/or goals are established:

- Definition of standardised specifications/tenders for government procurement;
- Training of more than 8,000 public servants in matters of Public Innovation and Public Procurement for Innovation;
- Push for a socially and environmentally sustainable procurement system, led by Colombia Compra Eficiente;
- More than doubling of the percentage of public resources managed on platforms of the national contracting agency.

2.1 Government procurement agencies in Colombia

The national government procurement agency, Colombia Compra Eficiente (CCE) is a decentralized entity established in 2011 attached to the National Planning Department, with its own legal status and assets, and administrative and financial autonomy. Its objective is to develop and promote public policies and tools aimed at the organization and articulation of the participants in the procurement and public contracting processes in order to achieve greater efficiency, transparency and optimization of State resources. The strategic objectives of CCE are:²

- To increase the value for money allocated to government procurement;
- To promote competition in government procurement;
- To offer an easily accessible e-Procurement system for participants in the Public Procurement System that generates reliable information;
- To strengthen the capacities of participants in government procurement;
- To manage knowledge for participants in government procurement processes and for its own staff; and
- To generate an environment of respect for the rules of the game and trust among the participants in government procurement.

Among the main functions of CCE is to develop and administer the Electronic System for Public Procurement (Sistema Electrónico para la Contratación Pública, SECOP) and implement new technological developments to integrate them with the electronic management systems of the public administration. SECOP consists of two platforms that make up the virtual store of the Colombian State: SECOP I, which is a pure advertising tool, and SECOP II, a transactional system that allows all government procurement processes to be carried out online.³ Interested parties must go through an inscription and registration process and accept the terms and conditions of SECOP II.

Although the CCE provides the framework and support for government procurement, actual procurement procedures are carried out by procuring entities. These are state agencies at national, departmental and municipal levels as well as other entities belonging to the State.

¹ Departamento Nacional de Planeación. 2018. Plan Nacional de Desarrollo 2018-2022. Pacto por Colombia. Pacto por la equidad, Bogotá, <https://colaboracion.dnp.gov.co/CDT/Prensa/PND/Bases%20Plan%20Nacional%20de%20Desarrollo%20%28completo%29%202018-2022.pdf>

² See <https://colombiacompra.gov.co/secop/colombia-compra-eficiente/objetivos-institucionales>

³ A third system, the Virtual Store of the Colombian State (Tienda Virtual del Estado Colombiano, TVEC), is used for through which state entities carry out contracting processes to acquire: (i) goods and services through the framework contracts (Acuerdos Marco de Precios); (ii) goods and services under Demand Aggregation Contracts (Contratos de Agregación de Demanda); and (iii) Minimum Amount purchases by Large Warehouses.

2.2 Procedures for government procurement in Colombia

Colombian government procurement rules allow public entities to use different types of procurement procedures including public bidding; abbreviated selection (e.g. for routine, standardized products); selection based on qualifications/merits (e.g. used for consulting services where price is not the most important consideration); direct contracting; and minimum amount. A number of State Entities, such as Ecopetrol, Banco Agrario, the National Printing Office, have special procurement regimes ("regímenes especiales") which are not bound by Law 80 of 1993 and Law 1150 of 2007, but have to comply with some of the horizontal rules for good practice established e.g. in Decree 1082 of 2015 regarding transparency and predictability.

In general, the stages in a government procurement are as follows:

- The state entity identifies the need to acquire goods or services and generates a purchasing plan. Annual purchasing plans are published;
- The public entity prepares the draft specifications that are published on the single contracting portal (SECOP) for a set period;
- Interested parties can request clarification on the draft specifications;
- The procedure is opened with the publishing of the definitive tender specifications;
- Interested parties submit their proposals at the place and before the closing date;
- The state entity evaluates the qualifying requirements and assigns scores to the proposals submitted, based on the selection criteria;
- The contract is awarded to the highest ranked bidder that meets all the requirements of the tender. If no bidder meets all requirements, the procedure is cancelled.

Although the government procurement system is centralized through the CCE, state entities must determine, at the planning stage, if a trade agreement is applicable to the process they are designing. According to the CCE, the criteria to identify whether a contracting process is covered by an agreement are:

1. If the state entity is not included in the agreement or is on the list of exceptions, the contracting process is not covered by it;
2. If the state entity is included in the agreement and the estimated value of the contracting process is less than the value stipulated in the agreement, the contracting process is not covered;
3. If the state entity is included in the agreement and the estimated value of the contracting process is higher than the value stipulated in the agreement, the procedure is covered and the trade agreement's provisions are therefore applicable.

2.3 Market size and characteristics

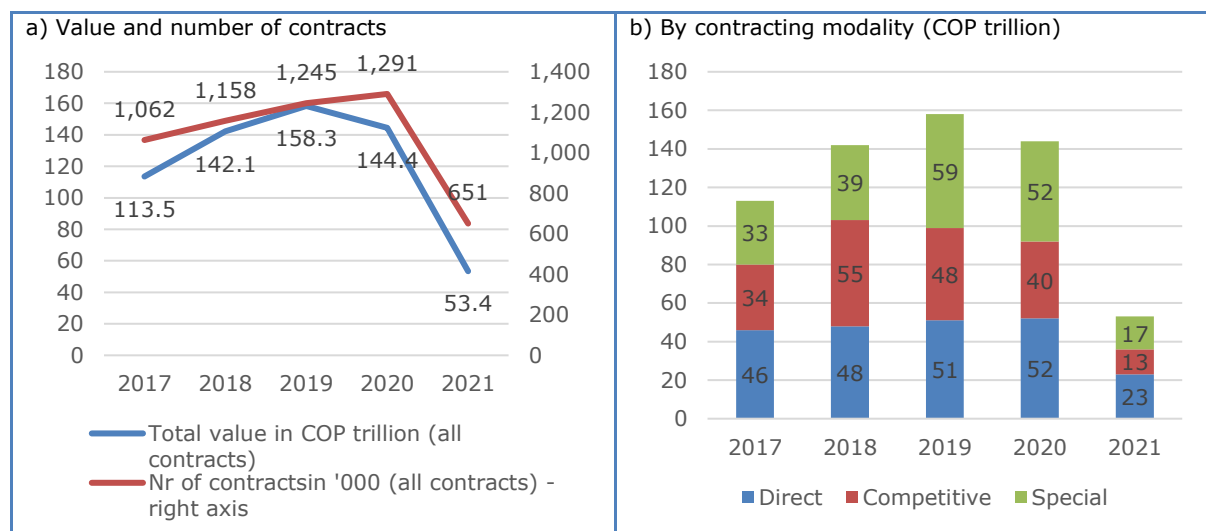
Detailed data on the government procurement market in Colombia are available only from 2017. The market is sizable, with government procurement accounting for an increasing share in GDP: 12.3% in 2017, and 14.9% in 2019.⁴ The total value of the market reached a high of COP 158.3 trillion (EUR 43.4 billion) in 2019, before contracting in 2020, to COP 144.4 trillion (EUR 34.2 billion) (Figure 1a). At the same time the number of contracts increased steadily from 2017 to 2020, reaching 1.29 million in 2020.

Among the three main contracting modalities (direct contracting and competitive contracting under the general procurement laws, as well as the special regime), each

⁴ Own calculations based on Colombia Compra Eficiente (procurement) and World Development Indicators (GDP)

account for roughly one third (Figure 1b). However, the share of competitive contracting, which reached COP 55 trillion, 38.7% of the total, in 2018, decreased to 27.8% in 2020.

Figure 1: Government procurement market in Colombia, 2017-2021



Source: Own calculations based on Colombia Compra Eficiente, "Análisis de Oferta"⁵.

3 PROVISIONS ON GOVERNMENT PROCUREMENT IN THE AGREEMENT

The Agreement's Title VI (Articles 172-194) covers government procurement and is complemented by Annex XII, which details the commitments of Parties in this area, specifying the procuring entities covered, threshold for the value of contracts above which the provisions apply, exemptions from the coverage, as well as key features of the process for awarding procurement contracts.

Some of the general principles governing government procurement under the Agreement are that:

- The Parties offer national treatment to each other to covered procurement (i.e. procurement by the entities listed in the Agreement for contracts above the thresholds stated in the Agreement) (Art. 175);
- Parties publish any changes in procurement rules and explain these to the other party upon request (Art. 176);
- Parties maintain timely, effective, transparent and non-discriminatory domestic review procedures through which government procurement decisions can be challenged by an interested party (Art. 190);
- Procuring entities will carry out covered government procurement in a transparent and impartial manner that avoids conflicts of interest and prevents corrupt practices (Art. 175), which includes the publication of procurement plans and forecasts (Art. 177) and of contract award decisions (Art. 188), as well as rules for information disclosure (Art. 189);
- Procuring entities comply with certain minimum requirements regarding conditions of participation in government procurement procedures (Art. 178), the use of selective tendering (i.e. restricted procedures, Art. 179), multi-use lists of potential suppliers (Art. 180) and limited tendering (i.e. without competition, Art. 185), as well as regarding the tender specifications (Art. 181) and documents (Art. 182), and tender procedures (Art. 183, 184, 186, 187); and

⁵ <https://app.powerbi.com/view?r=eyJrIjojZTZlYjRmMzgtOTJlYS00ZDBkLTgxZDUtZGYyYTI5ZGM5NDgyIiwidCI6IjdiMDkwNDZlTlQNTTtNDikMC04Y2IxLTc5ZDVIM2Q4YzFzFzIsImMiOiR9> [accessed 21 June 2021]

- Parties exchange information and collaborate with a view to facilitating access to government procurement markets by MSMEs (Art. 192).

Specifically regarding the commitments made by Colombia with regard to the entities covered and thresholds, these are specified in Section A of Appendix I to Annex XII of the Agreement. Table 2 provides an overview. For certain procuring entities, the notes to the section provides exemptions of coverage; for example, the procurement of food and agricultural raw materials by several ministries and by all sub-central entities is excluded from covered procurement under the Agreement.

Table 2: Colombian procuring entities and thresholds as defined in the Agreement

Level/type of procuring entity	Procuring entities	Thresholds for goods and services (Special Drawing Rights/'000 pesos 2021-22 ⁶)	Thresholds for construction services/works (Special Drawing Rights/'000 pesos 2021-22)
National (central government entities) (Subsection 1)	28 entities of the national executive, legislative, and judicial branches as well as agencies	SDR 130,000 / COP 610,127	SDR 5,000,000 / COP 23,466,406
Departmental, municipal, special (sub-central government entities) (Subsection 2)	All departamentos and municipios	SDR 200,000 / COP 938,656	SDR 5,000,000 / COP 23,466,406
Special (other covered entities) (Subsection 3)	10 entities ⁷	SDR 200,000 / COP 938,656	SDR 5,000,000 / COP 23,466,406

Sources: Annex XII of Agreement (SDR) and Colombia Compra Eficiente (pesos)⁸

Following bilateral discussions between the EU and Colombia on the scope of coverage at the sub-central level in Colombia, in 2017 the Agreement was amended by a decision of the Trade Committee to clarify this coverage by adding the following clause in the notes to Subsection 2 in Section A to Appendix 1 of Annex XII: "For the purposes of this Subsection 'procuring entities' cover all sub-central public procuring entities not having an industrial or commercial character."⁹ As this was deemed to be a clarification of the scope rather than a reduction of coverage, no compensatory adjustment was required.

Because Colombia is not a Party to the WTO Government Procurement Agreement (GPA), the Agreement provides actual preferences to EU companies compared to those countries which do not also have an FTA with Colombia covering government procurement. At present, Colombia's FTAs with Canada, Chile, Costa Rica, EFTA, South Korea, and the United States, as well as the Pacific Alliance (Chile, Mexico and Peru) also contain provisions on government procurement. Comparing the thresholds in the various FTAs, Figure 2 shows that the threshold for central procurement of goods and services in the Agreement with the EU is almost three times as high as e.g. in Colombia's FTAs with Chile

⁶ The calculation of thresholds from SDR into Colombian pesos is adjusted every two years (Item 3 of Subsection 7, Section A of Appendix I to Annex XII of the Agreement).

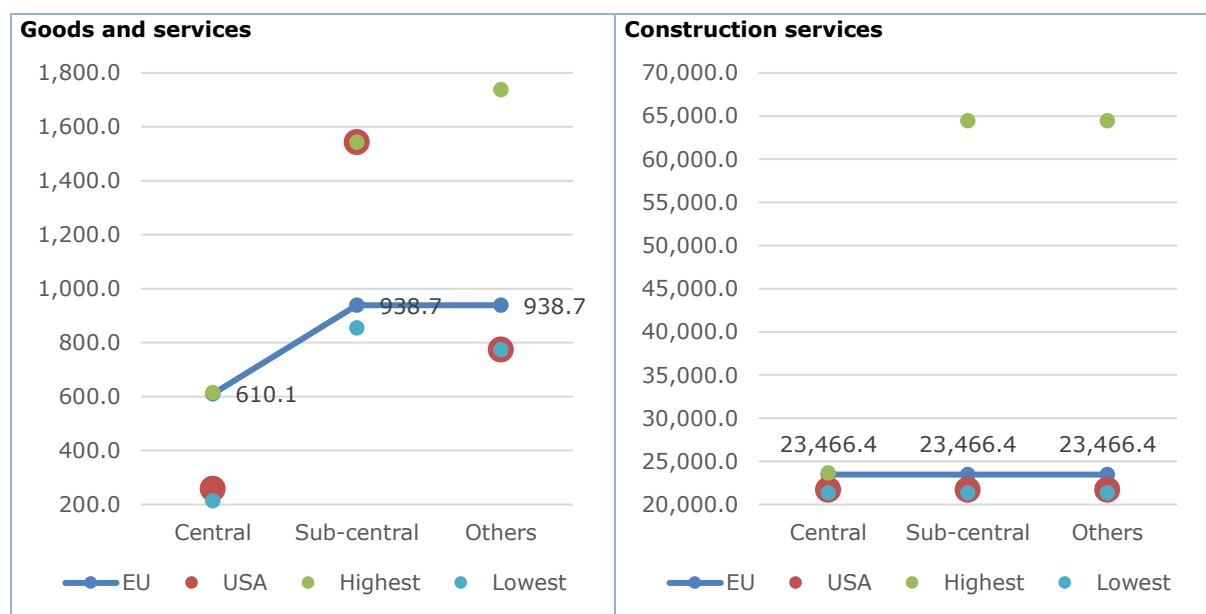
⁷ 13 other entities are listed as not covered but nevertheless must conduct "procurements in a transparent manner, in accordance with commercial considerations, and treats suppliers of the EU Party at least as favourably as it treats domestic and other foreign suppliers with respect to all aspects of its procurement, including the conditions, requirements, procedures and awarding rules for a procurement" (Item 2 of Subsection 7, Section A of Appendix I to Annex XII of the Agreement).

⁸ https://www.colombiacompra.gov.co/sites/cce_public/files/files_2020/cce_documentos/umbrales_2020-2021.pdf

⁹ Decision No 1/2017 of the EU-Colombia-Peru Trade Committee of 24 November 2017 amending Appendix 1 of Annex XII ('Government Procurement') to the Trade Agreement between the European Union and its Member States, of the one part, and Colombia and Peru, of the other part. OJ L1, 4.1.2018, p.1 (<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22018D0001&from=EN>).

or the USA.¹⁰ For "other" procuring entities and procurement at the sub-central level, the Agreement's thresholds are only slightly above the FTAs with the lowest thresholds. For construction services, thresholds are largely equal in most FTAs with the exception of Colombia's FTA with Korea that has substantially higher thresholds for non-central government procurement.

Figure 2: Procurement thresholds in Agreement compared with Colombia's FTAs overall (million COP, 2020/21-2021/22)



Source: Own preparation based on Colombia Compra Eficiente¹¹

In sum, based on the Agreement's provisions, compared to competitors without an FTA, if properly implemented the Agreement confers a benefit to EU companies interested in the Colombian government procurement market, while setting EU companies roughly at an equal footing with competitors in other countries having FTAs covering procurement (except for procurement of goods and services at Colombia's central level). The extent to which this benefit is actually realised, depends on the implementation of the Agreement. We therefore discuss next a number of issues that have been raised by stakeholders in the consultations as well as in other studies.

4 IMPLEMENTATION ISSUES RELATED TO GOVERNMENT PROCUREMENT

As mentioned above, one area of divergent views between the EU and Colombia has been the Agreement's coverage of government procurement at sub-central levels in Colombia. As also mentioned, EU stakeholders in Colombia consulted for the evaluation noted various issues with the government procurement system, which is considered as one of the areas where the implementation of the Agreement poses the biggest problems. Interviewed business stakeholders considered that procedures lack transparency (this was mentioned by both EU and Colombian business representatives) and that the costs of participation, including due to excessive information and documentation requirements were too high. These concerns were made across sectors and types of procurement. In response to these

¹⁰ Note that this comparison is based only on the level of thresholds. It might well be that the coverage of procuring entities is different (and possibly more limited) in other FTAs, which would also have an impact on the size of the contestable market.

¹¹ https://www.colombiacompra.gov.co/sites/cce_public/files/files_2020/cce_documentos/umbrales_2020-2021.pdf

challenges, it was also noted that many EU firms would only access government procurement markets in consortia led by, or as sub-contractors of, domestic companies.

On the positive side, no complaints were raised with regard to other provisions of the Government procurement title, such as the application of rules of origin (Art. 175(6)), valuation of contracts (Art. 173(6-8)), etc.

The following sections provide more details.

4.1 Interpretation of covered procurement at the sub-central level in Colombia

Following the clarification of the scope of the Agreement's coverage regarding procurement by sub-central levels in Colombia in late 2017, at subsequent meetings of the Sub-committee and Trade Committee, the EU nevertheless raised concerns that despite the Decision, "companies of the EU Member States are not receiving national treatment in important projects due to an excessively strict interpretation of the exception regarding entities with an industrial character. Given that projects such as metro, municipal buses and hospitals are being developed through entities with an industrial character, the Decision is being ignored."¹²

Meanwhile, the Government of Colombia considers that entities that have an industrial and commercial character (including, e.g. metros) would not be covered by the Agreement, and that the inclusion of such entities would need to be negotiated in accordance with Article 191(5) of the Agreement. Similarly, it considers that Corporaciones Autónomas Regionales (CARs), according to a 2010 judgement of the Constitutional Court are not sub-central entities but national (central) ones, and as such would be covered by the Agreement only if listed explicitly in Subsection 1 of Section A of Annex XII to the Agreement. The Colombian Government has further stated in consultations for the evaluation that "it is necessary to highlight the broad access that the EU bidders have under the Agreement, because as Colombia has stated in the different Subcommittees, despite the difference in interpretation regarding the entities of 'industrial and commercial' character at the sub-central level, the coverage of the Agreement is quite broad and covers multiple entities at the sub-central level."

The evaluation team notes that the differences in view over the coverage of the Agreement in terms of procuring entities at the sub-central level continue despite the 2017 Trade Committee Decision. It would be desirable if an indicative list of departmental and municipal "entities having an industrial or commercial character" (or those not having such character) be drawn up by the Sub-committee on Government Procurement.

4.2 Implementation of the Agreement's government procurement commitments by sub-central procuring entities

Related to the previous issue, concerns were raised by EU stakeholders that not always covered sub-central procuring entities would allow bidding by EU companies. Representatives of the Colombian authorities consulted for the evaluation agreed that this might happen in exceptional cases but also noted that a number of measures and procedures were in place to avoid or correct such cases.

First, MINCIT carries out trainings and disseminates the obligations of the Agreement, including in government procurement. In addition, and more specifically, CCE provides

¹² "[L]as empresas de los Estados miembros de la UE no están recibiendo el trato nacional en proyectos importantes debido a una interpretación excesivamente estricta de la excepción respecto a empresas de carácter industrial. Dado que proyectos como metro, buses municipales y hospitales se están desarrollando a través de empresas industriales, se está obviando la Decisión", Acta. V Comité de Comercio Acuerdo Comercial Colombia – Ecuador – Perú – Unión Europea, Quito, 13 y 14 de diciembre de 2018, p. 3.

training for procuring entities, suppliers, the media, control entities and interested citizens. It also provides free virtual training on a dedicated website.¹³ CCE also provides tools and trainings with the purpose of making the obligations known, and of explaining how the purchasing system works and how to use the platforms. At these trainings people register and enter with their user and ask all kinds of questions regarding how to apply the obligations; that is what is usually done in this type of awareness that the interested parties require. At the same time, Colombian stakeholders acknowledged that even more dissemination and training regarding the Agreement's government procurement provisions was desirable.

Second, a "Manual for the Management of Trade Agreements in Procurement Processes"¹⁴ is available. This specifies that state entities have the obligation to analyse during the planning stage which are the applicable trade agreements for a procurement procedure. Although the Manual is not binding, the Government considers that state entities generally comply with it.

Third, companies feeling aggrieved should first raise their concern with the state entity concerned. If this does not solve the issue, they should inform CCE and MinCIT about the case, which would then study it and issue a formal communication (see next section for more detail); indeed this happens, but according to the Colombian government in many cases the issue is not one of implementation of the Agreement's provisions but the divergence in views over the coverage at sub-central level, as addressed in the previous section.

The evaluation team could validate neither the claims made by EU stakeholders about the implementation issues nor, in general, the effectiveness or functioning in practice of the measures listed by the Colombian authorities. It was noted, however, that CCE's e-learning website had no content when visited between April and June 2021. Nevertheless, the main issue regarding EU market access to Colombia's sub-central procurement markets does appear to be the disagreement over coverage, as discussed above.

4.3 Transparency issues and ease of access to procedures

In view of the concerns over the implementation of the Agreement's government procurement provisions in Colombia, in 2020 a specific analysis and position paper was produced regarding the issues that EU suppliers and service providers face (Development Solutions 2020). Among the issues listed in the position paper that could be noncompliant with the Agreement are the following ones:¹⁵

- The application of a requirement that bidders have previous experience in Colombia, in violation of Article 178 of the Agreement;
- Existence of national preferences which may be against the national treatment provision in Article 175(1)(b);
- The use of tender specifications based on design and descriptive characteristics, rather than performance or functional requirements, despite the opposite provision in Article 181(2)(a);
- Lack of specifications based in international standards even when these are available (as required in Article 181(2)(b));

¹³ <https://aula.colombiacompra.gov.co>

¹⁴ Colombia Compra Eficiente 2019: "Manual para el manejo de los Acuerdos Comerciales en Procesos de Contratación", M-MACPC-14 (published 27 November 2013, last updated 02 May 2019), available at: https://www.colombiacompra.gov.co/sites/cce_public/files/cce_documents/cce_manual_acuerdos_comercial_es.pdf [accessed 24 May 2021].

¹⁵ The paper also lists other issues of the public procurement practice in Colombia as seen by EU companies – such as the requirement to have documents notarised in Colombia – but which would not seem to be directly related to Agreement provisions; these are not summarised here.

- Generally, the lack of a “timely, effective, transparent, and non-discriminatory” government procurement system in Colombia.

Some of these issues were also mentioned by consulted EU stakeholders.

Representatives of the Colombian authorities acknowledged that in a limited number of cases problems have occurred. An example provided, regarding the specification of standards, was a procurement procedure by the Pereira fire department for fire extinguishers, which in the specifications referred to an American standard without providing the European equivalent. As a result, European companies found it impossible to comply with the specifications, because they do not produce under the US standard. In this case, MinCIT, after having been alerted by a bidder, issued a formal communication informing the entity that reference to the US standard was against the law and the Agreement.

With regard to the requirement of previous experience in Colombia, the Colombian government clarified to the evaluation team that such a requirement would not be in line with the national procurement rules. Experience is the knowledge of the bidder derived from previous participation in activities equal or similar to those foreseen in the contract being procured. This experience can be obtained with public, private, national or foreign contracting authorities, and therefore state entities must not require that the previous experience be exclusively in Colombia. Therefore, bidders encountering any such requirement in the tender dossier should contact the procuring entity for rectification.

Regarding the observation made by EU stakeholders regarding the possible existence of national preferences, this was based on an interpretation of Law 816 of 2003, which stipulates that in government procurement procedures criteria should be adopted to support the national industry (granting an advantage of between 10% and 20% in the scoring). Nevertheless, the paragraph to Article 1 of Law 816, modified in 2012, clarifies that national treatment “will be granted to those goods and services originating from countries with which Colombia has negotiated national treatment in matters of government procurement and from those countries in which bids by Colombian goods and services are granted the same treatment granted to its national goods and services.”¹⁶ In line with this, the Colombian government informed the evaluation team that no preferential treatment is provided to domestic bidders in covered procurement procedures, and if EU bidders feel aggrieved they should inform the entity concerned and/or CCE and MinCIT.

MinCIT also mentioned that complaints or requests for clarification or interpretation by EU companies about procedural or substantive issues related to tenders – such as notices, procedural stages, general conditions, requirements, or specifications – are very rare. More frequent are requests or complaints on matters of national treatment and the coverage of the Agreement; in some cases this has referred to their interest in bidding with an entity that is not covered by the Agreement as per the Colombian government’s interpretation of the Agreement, because it is an industrial and commercial company of the State at the sub-central, departmental or municipal level (see the discussion in the previous two sections).

In a response to the more general claim regarding insufficient transparency and openness, the Colombian government considered that in particular with the implementation of the SECOP II platform the Colombian State has made progress in expanding openness and transparency of contracting processes managed by entities that contract with public resources, as the whole procurement process has moved online and no longer requires

¹⁶ “Se otorgará tratamiento de bienes y servicios nacionales a aquellos bienes y servicios originarios de los países con los que Colombia ha negociado trato nacional en materia de compras estatales y de aquellos países en los cuales a las ofertas de bienes y servicios colombianos se les conceda el mismo tratamiento otorgado a sus bienes y servicios nacionales.”

direct interactions between bidders and procuring entities.

In consultations for the evaluation, Colombian business representatives have acknowledged these efforts to enhance transparency but complained that the resulting system is overly complex and creates barriers to access, in particular for MSMEs, both Colombian and foreign ones. The complexity of rules would also mean that foreign companies de facto need to use Colombian lawyers to assist them navigate the system (although this is legally not required), which increases the cost of participation for them. It was also noted that registration in SECOP II was inherently difficult, and few firms would manage this without some type of specialist support.¹⁷

With regard to the concerns voiced regarding the transparency and fairness of procurement procedures, the evaluation team notes these have been raised by both EU and Colombian business representatives. The evaluators also note, based on the contributions provided by stakeholders, that despite the developments made with regard to an increased use of electronic procurement systems such as SECOP II or TVEC, challenges regarding transparency and fairness remain; and positive effects of the Agreement on improved procedures or transparency are not found.

5 OUTCOMES: PARTICIPATION OF EU COMPANIES IN COLOMBIAN GOVERNMENT PROCUREMENT

As the Agreement only liberalises the Colombian procurement market for EU firms only above certain contract threshold levels, the contestable market for them is smaller than the total market. For simplicity reasons, we take a contract value of COP 600 million for all procedures as the threshold, this reflects the lowest threshold set in the Agreement (for goods and services at the central level) and therefore slightly overestimates the actual market size that is contestable for EU businesses.

Figure 3a shows that the development of the contestable market size over time is closely related to the overall market, reaching a peak of COP 124.8 trillion (EUR 34.2 billion) in 2019; compared to the size of the total market, the share of the market contestable for EU providers fluctuated between 75% and 80% (with the exception of 2021 so far, where it has been 68%). In terms of the number of contracts, because many contracts have small value, only about 20,000 contracts per year fall above the threshold (and thus constitute the universe of contracts for which EU bidders could be eligible), compared to more than 1 million contracts signed per year overall (see above).

The vast majority of contracts in Colombia are awarded to domestic providers: with the exception of 2020, in each year between 2017 and 2021 the share of national providers in total contracts awarded clearly exceeded 99%; in 2020 it was 98.9% (Table 3).

Table 3: Value of government procurement contracts in Colombia by nationality of provider

	2017	2018	2019	2020	2021
National providers (COP trillion)	64.5	84.7	90.9	91.5	33.1
Foreign providers (COP trillion)	0.2	0.3	0.3	1.0	0.2
Total (COP trillion)	64.7	85	91.2	92.5	33.3
Share foreign providers in total value	0.3%	0.4%	0.3%	1.1%	0.6%

Note: Excludes contracts awarded under the special regime.

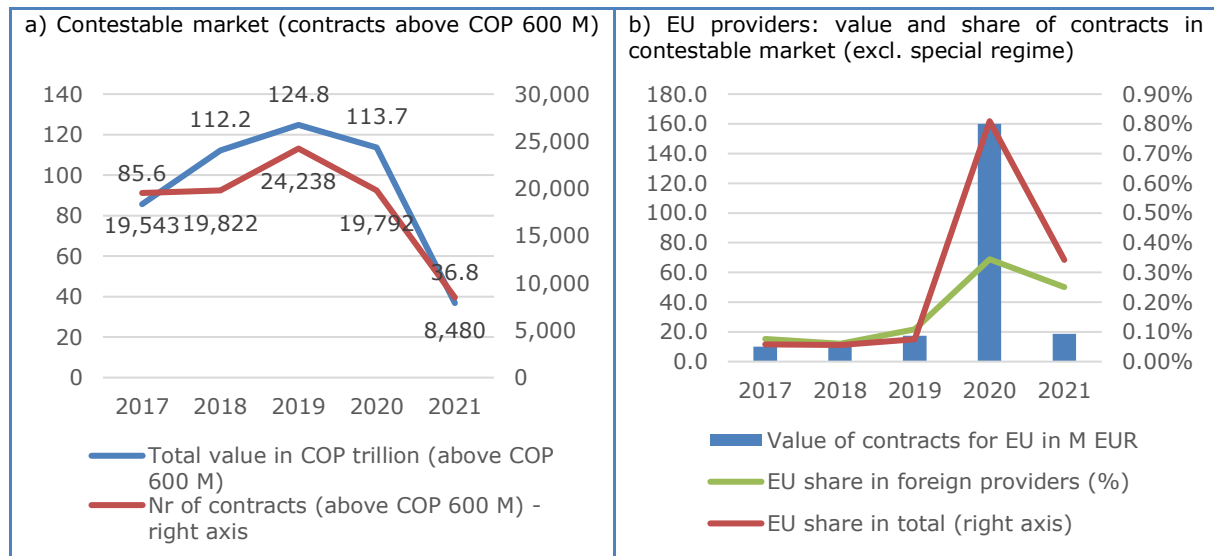
Source: Own calculations based on Colombia Compra Eficiente, "Análisis de Oferta"¹⁸.

¹⁷ For a further critique of SECOP II from an EU business perspective, see Development Solutions (2020, 26).

¹⁸ <https://app.powerbi.com/view?r=eyJrIjoizTZYIjRmMzgtOTJiYS00ZDBkLTgxZDUtZGYzYTl5ZGM5NDgyIiwidCI6IjdiMDkwNDZlTlONTetNDikMC04Y2IxLTc5ZDVIM2Q4YzFiZSI6ImMiOjR9> [accessed 21 June 2021]

While the participation of foreign providers overall is very low, the participation of EU providers is even lower, although it increased in 2020 and 2021: the value of contracts awarded to EU providers stayed below EUR 20 million during 2017 to 2019, then jumped to EUR 160 million – largely driven by procurements related to covid-19 – with initial data for 2021 showing a decline again, although still above the pre-2020 levels (Figure 3b). In relative terms, the share of EU providers in the total contestable contract value was between 0.06% and 0.07% in 2017 to 2019, then jumped to 0.8% in 2020 and declined again to 0.34% in 2021 so far. Compared to other foreign competitors, the EU share was in the range of 20% from 2017 to 2019, increased to almost 70% in 2020 and fell again to 50% in 2021 so far.

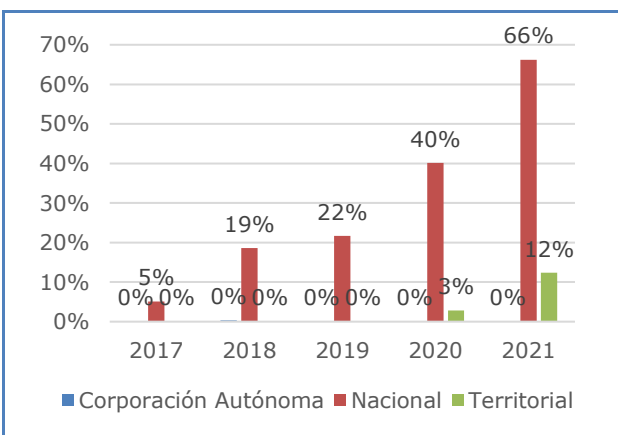
Figure 3: EU role in Colombia's government procurement market, 2017-2021



Source: Own calculations based on Colombia Compra Eficiente, "Análisis de Oferta"¹⁹.

Finally, some more disaggregated data are available under Colombia's Open Data initiative. These show that the EU's share in contracts awarded by central procuring entities to foreign services providers under SECOP II²⁰ have consistently increased since 2017, from 5% to 66% so far in 2021 (Figure 4). Sub-central procuring entities – which account for 95% of the contract value awarded in 2017 to 2021 – have awarded their first contracts to EU providers in 2020 (3% of contract value awarded to foreign providers by sub-central entities) and 2021 (12%). This shows that (a) the share of contracts awarded to EU providers through SECOP II is higher than average; and (b) that EU participation in sub-central procurement is still very limited – even within the small share of contracts

Figure 4: Share of contracts awarded to EU providers in total value of contract awarded to foreign providers, by level of procuring entity (SECOP II only)



Source: Own calculations based on <https://www.datos.gov.co/Gastos-Gubernamentales/SECOPII-Proveedores-Extranjeros/792q-xj47/data> [accessed 17 June 2021]

¹⁹ <https://app.powerbi.com/view?r=eyJrIjojZTZYIjRmMzgtOTJlYS00ZDBkLTgxZDUtZGYyYTI5ZGM5NDgyIiwidCI6IjdiMDkwNDkMTkNTTjNDkMC04Y2IwLTc5ZDVIM2Q0YzFhZSIsImMiOiR9> [accessed 21 June 2021]

²⁰ Due to the manner in which data are provided in datos.gov.co, the calculation of EU shares in total contracts awarded is a complex exercise that would be beyond the scope of the present study.

that are awarded to non-Colombian providers.

6 CONCLUSIONS AND RECOMMENDATIONS

EU providers have raised a number of irritants which they consider limit their participation in Colombian government procurement. Representatives of the Colombian government disagree with these views and have explained the procedures in place including for addressing providers' questions, concerns and complaints.

In terms of the actual participation of EU providers in Colombia's government procurement markets, we note that this still remains very limited, although some positive developments were registered in recent years; at the same time, the spike in procurement from EU providers in 2020 (and also in 2021) appears to be due to the exceptional situation created by covid-19 and the related procurements in the health sector. In sum, despite some encouraging developments regarding the role of EU businesses in Colombian government procurement, further improvements, including on the interpretation of the scope of the agreement and implementation could be undertaken.

In this context, the following measures could help to further open the market to EU providers:

1. The Sub-committee on Government procurement could prepare indicative lists of procuring entities at the sub-central level. The aim of this exercise would be to reduce uncertainty over the scope of covered procurement under the Agreement.
2. MinCIT and CCE should continue to provide training to procuring entities on the obligations under the Agreement, as well as encourage an even more extended use of SECOP II.
3. More user-friendly guides on the Colombian procurement systems, as well as the administrative measures in place for addressing and resolving disputes should also be provided for the benefit of EU providers.
4. The CCE and the Commission should foresee more experience-sharing and mutual training on the respective procurement systems (TED and SECOP, respectively).

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CASE STUDY 3 – IMPACT OF THE AGREEMENT ON SUSTAINABLE FARMING OF BANANAS IN THE ANDEAN PARTNER COUNTRIES

1 INTRODUCTION

A direct impact of the Agreement on sustainable production is, by definition, not possible, because the Agreement does not incorporate any specific provisions for organically, sustainably or fairly produced products.¹ Likewise, the negotiation and conclusion of equivalence agreements on organic production is not undertaken inter-governmentally between the Parties in the framework of the Agreement. Although the topic is often discussed in the meetings of the Sub-committee on Agriculture, the discussions are only at the level of information exchange.

Nevertheless, although the Agreement establishes no specific rules on organic, fair, or other sustainable production or farming practices, it cannot be excluded that changes in such practices have resulted as an unintended effect: a potential effect of the Agreement on sustainable production or farming practices could e.g. be channelled through the fostering of increased investment by EU investors or by greater demand for sustainably produced products in the EU triggered by the Agreement.

The purpose of this case study therefore is to determine to what extent and how the Agreement has led to a change in production towards sustainable farming practices in the Andean partner countries, taking the example of bananas; some observations also refer to sustainable farming of other crops, such as cocoa, coffee, and tropical fruits.

The case study is structured as follows: Section 2 provides an overview of sustainable farming and exports of bananas from the three Andean countries participating in the Agreement, also addressing social, labour and environmental issues; the focus is on developments since 2008. Section 3 then aims at determining to what extent the observed developments can be attributed to the Agreement. Section 4 provides conclusions and recommendations.

2 SITUATIONAL ANALYSIS: PRODUCTION OF AND TRADE IN SUSTAINABLY FARMED BANANAS IN COLOMBIA, ECUADOR AND PERU

2.1 Production

To start with, it should be noted that statistics on organic production are fairly unreliable; different data sources apply different definitions, and data often rely on surveys the results of which are then extrapolated to the national level. One important source providing statistics over the years are FIBL/IFOAM's annual "World of Organic Agriculture" reports; but even this relies on survey data and applies shifting definitions, which make time series data notoriously unreliable.

Bananas are the most important fruit being produced in **Latin America**. Organic production in 2019 accounted for almost 57 thousand hectares, 3% of the total cultivation

¹ This case study addresses sustainable production in a broad sense, i.e. covering both organic production and fair trade aspects. While some certification schemes only address one of the two dimension, there has been a convergence over the years both for the criteria in individual certification schemes to be broadened and encompass both environmental and social/labour related criteria, and for producers to carry dual (or multiple) certifications.

area for bananas. Ecuador is the second most important producer (almost 17,000 ha); after the Dominican Republic (25,000 ha); in terms of the number of organic producers (of all commodities), Peru leads in the region, with almost 81 thousand (Meier et al. 2021). Nevertheless, the share of agricultural land being cultivated organically in 2019 (across all commodities) is below the regional average of 1.2%: in Peru, 1.0%; in Ecuador, 0.9%; and in Colombia, 0.1% (Figure 2).

In **Colombia**, organic agriculture started in the 1980s. The first years of the 21st century saw rapid increase in the area of organically farmed land, from 25,000 ha in 2002 to more than 50,000 in 2006; of which, however, bananas constitute only a small share, as coffee dominates (Escobar 2009). Since then, however, the area cultivated organically has decreased to about 30,000 ha in 2019 (Figure 1), of which 6,290 were for tropical and subtropical fruit (0.9% of the total area devoted to such products) (Willer et al. 2021, 114). In January 2018, 84 banana plantations in Colombia were certified by the Rainforest Alliance, with a total production area of 7,134 hectares, comprising 47% of the banana sector in Magdalena and La Guajira (Beekman, Dekkers, and Koster 2019). The banana sector employs about 42,000 people (about 7.5% of the work force).²

In **Ecuador**, certified organic farming rapidly increased at the start of this millennium. The area under organic production increased from 11,000 ha in 2001 to more than 60,000 ha in 2007 (of which about 19,000 ha for bananas; the second most important organic product after cocoa), including aquaculture (Rovayo and Lehmann 2009), and reaching a peak of almost 70,000 ha in 2009. Since then, however, the area decreased to 42,000 ha in 2017 before recovering to about 48,000 in 2019 (Figure 1); nevertheless, the share of organically farmed land in total farmed land increased from about 0.6% in 2013 to 0.9% in 2019 (Figure 2); for tropical and subtropical fruit (mostly bananas), this share is however substantially higher, at 5.8% (Willer et al. 2021, 114). The number of organic producers also increased, from fewer than 10,000 in 2011-2013 to more than 13,000 in 2019. According to a 2019 banana farm survey covering El Oro, Guayas and Los Rios provinces, 15% of the farms had organic certification (of which 4% EU Organic), 15% Rainforest Alliance certification and 3% Fairtrade, compared with 74% GlobalGAP (University of California Davis 2020).³ At the same time, the actual scale of organic production is higher, as many small-scale producers, which constitute the vast majority of Ecuador's farmers, also apply organic farming techniques but without being certified.

Since it was initiated in the 1990s, organic production in **Peru** has been introduced on a substantially larger scale than in Colombia or Ecuador, but has also been much more volatile over the last decade: it more than tripled from 125,000 ha in 2007 to 388,000 ha in 2013, but since decreased again to 236,000 ha in 2019 (Figure 1).⁴ In line with this, the share of organically cultivated land in total cultivated land increased from 0.6% to 1.8%, and then dropped again to 1.0%, in the respective years (Figure 2); for tropical and subtropical fruit, this share is higher, at 3.1% (Willer et al. 2021, 115). Also, according to FAO estimates, production of organic bananas increased by 94% between 2010 and 2015, with the cultivation area in 2014 accounting for 4% of the total banana production area.⁵ Sustainable banana production in Peru is concentrated in the north-west and is dominated by small-scale producers, with farms (in 2014/15) averaging 3 hectares, that are organised

² Rainforest Alliance (n.d.): Response to the evaluation study "Towards a sustainable banana supply chain in Colombia: Rainforest Alliance Certification and economic, social and environment conditions on small-scale banana plantations in Magdalena, Colombia", <https://www.rainforest-alliance.org/wp-content/uploads/2021/07/response-to-sustainable-banana-supply-chain-in-colombia.pdf>. About 22% of Rainforest Alliance certified bananas worldwide are produced in Colombia.

³ No detailed information was provided on multiple certifications, apart from the fact that overall 79% of the farms had at least one certification.

⁴ Note, however, the unreliability of the data referred to above: for example, within the same report "The World of Organic Agriculture 2015" (which is the basis of the numbers reported here), another chapter refers to a much smaller area under organic cultivation in Peru of 230,936 ha.

⁵ "Organic banana production in Peru", 2017, FAO, <http://www.fao.org/world-banana-forum/projects/good-practices/organic-production-peru/en/> [accessed 25 June 2021].

in cooperatives.⁶ For 2018, sources mention a total area of organic banana production of 8,000 ha and 10,000 farmers, i.e. an average farm size of only 0.8 ha.⁷ At the same time, some large producers have also entered the market, with farms reaching up to 453 ha.⁸ In 2019, according to Minagri, the area was 15,000 ha on 8,411 farms.⁹ Although banana production in Peru started relatively late, the country has an advantage over its competitors: its bananas are organic by default due to the climatic and geographical conditions, which result in a low incidence of Black Sigatoka and other diseases and therefore not require the use of pesticides.¹⁰

Figure 1: Land under certified organic cultivation, Andean partner countries, 2007-2019 ('000 ha)

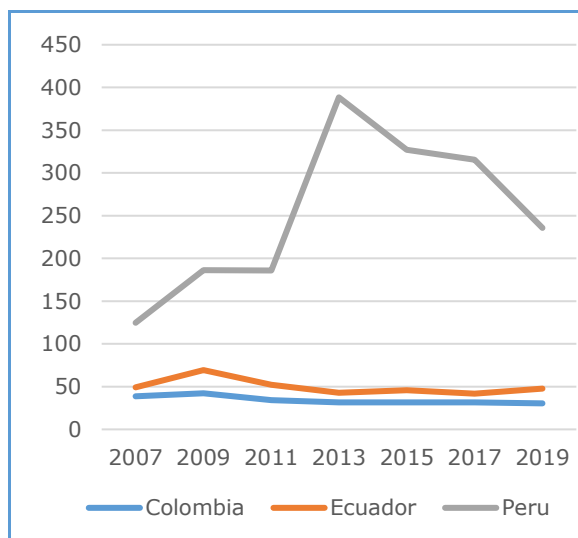
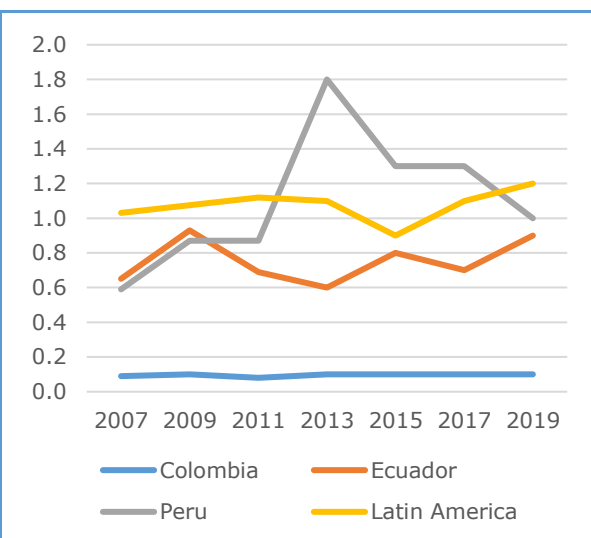


Figure 2: Share of land under organic cultivation in total land under cultivation, Andean partner countries, 2007-2019 (%)



Source: FIBL/IFOAM: The World of Organic Agriculture. Statistics and Emerging Trends, various issues 2009-2021.

2.2 Trade

Total EU imports of bananas from the three partner countries developed unevenly during the Agreement period (Figure 3). For Colombia, imports since 2014 have been higher than in the years preceding the Agreement, with an increasing trend (from about 900,000 tonnes in 2013 to 1.2 million in 2019); the same is true for Ecuador since 2017 (from 1.2 million tonnes in 2016 to 1.5 million tonnes in 2019), although with a high degree of volatility. For Peru, although imports since 2013 have been higher than before the Agreement started to be applied, the post-Agreement growth trend in years 2014-2018 was stopped in 2019 when a drop in Peru exports to the EU was observed. Until 2013,

⁶ "Unconventional Bananas in Peru: an Interview with Julio Oscar Gallegos Herrera-Rambla", Angelica Hicks/Equal Exchange, 14 March 2019, <https://blog.equalexchange.coop/unconventional-bananas-in-peru/> [accessed 26 July 2021].

⁷ "Perú ya no corre solo en la producción de banano orgánico", Redagricola, November 2018, <https://www.redagricola.com/pe/peru-ya-no-corre-solo-en-la-produccion-de-banano-organico/> [accessed 10 July 2021].

⁸ This farm belongs to AgroAmérica, a company of Guatemalan origin. Other large developments are Agrícola San José (175 ha); Copdeban/Dole (160 ha), Rapel (150 ha), Agronorte (100 ha) and Musterion (80 ha). See "Perú ya no corre solo en la producción de banano orgánico", Redagricola, November 2018, <https://www.redagricola.com/pe/peru-ya-no-corre-solo-en-la-produccion-de-banano-organico/> [accessed 10 July 2021].

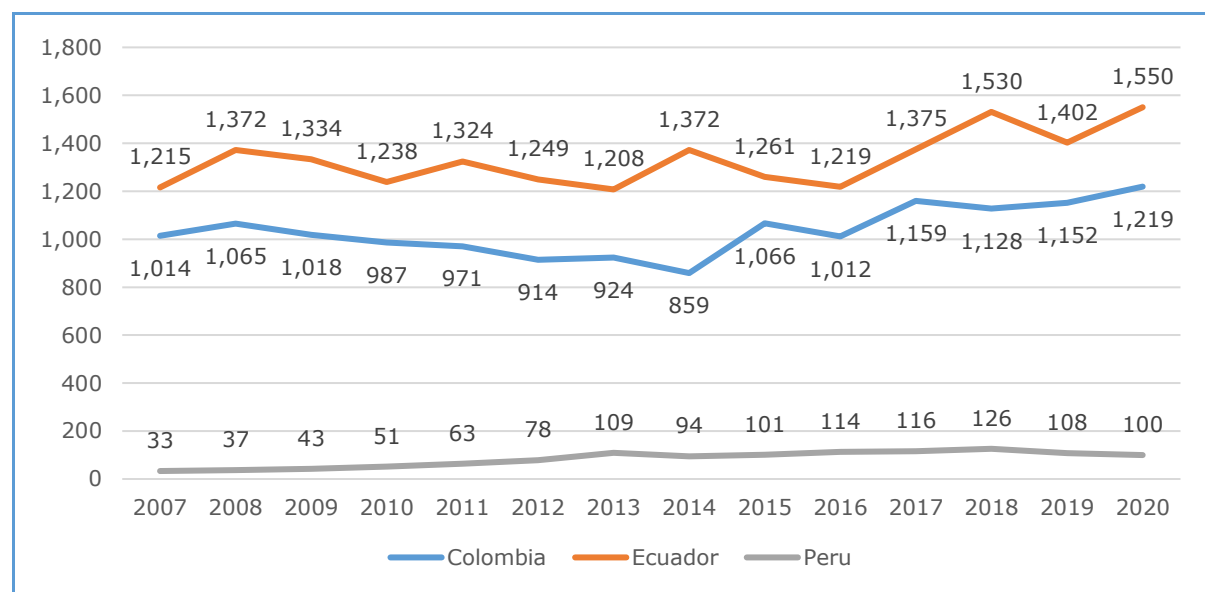
⁹ "Exportaciones de banano orgánico superan los US\$ 117 millones hasta setiembre de este año", Ministerio de Desarrollo Agrario y Riego, 04 November 2019, <https://www.gob.pe/institucion/midagri/noticias/65980-exportaciones-de-banano-organico-superan-los-us-117-millones-hasta-setiembre-de-este-ano> [accessed 12 July 2021].

¹⁰ "First organic banana cluster created in Peru", Maura Maxwell/Eurofruit, 05 January 2021, <http://www.fruitnet.com/eurofruit/article/183907/first-organic-banana-cluster-created-in-peru> [accessed 14 July 2021].

exports still increased, as part of the young sector being built, to about 109 thousand tonnes (up from 33 thousand tonnes in 2007), the same level as in 2019 (and more than in 2020). The banana stabilisation mechanism may have played a role in this. Although this was not formally triggered, it may have established an implicit ceiling, limiting potential further growth (also see the analysis in section 6.9 of the main report).

Also, as shown in the main report, the share of banana imports from the three Andean partner countries in the EU's total banana imports has not increased, when comparing the pre- and post-Agreement periods (see Figure 6-26 in the main report).

Figure 3: EU imports of fresh bananas from partners, 2007-2020 ('000 tonnes)



Source: Eurostat COMEXT database.

In 2019, the most imported organic products in the EU were tropical fruit, nuts and spices accounting for 27% of the total volume of organic imports. Organic tropical fruit, nuts and spices are imported mainly from the Dominican Republic (34% of total, equal to 0.3 million tonnes), Ecuador (31%) and Peru (15%). Bananas represent a significant part of these imports, constituting 85% of tropical fruit imports (European Commission 2020).

Time series data on EU imports of organic products only capture the last three years (2018 to 2020).¹¹ They show a rapid increase in the total EU27 import of organic bananas from 535 thousand tonnes in 2018 to 679 thousand tonnes in 2020, or 12.7% per year.¹² The share of the three Andean partner countries in total organic banana imports was high, but decreased considerably, from 68.9% in 2018 to 61.6% in 2020, as imports from these three countries increased at a slower rate (from 368 thousand tonnes to 418 thousand tonnes, or 6.7% per year) than from the rest of the world (Figure 4). Also, the performance varied considerably: exports of organic bananas from Peru to the EU decreased, while those from Colombia doubled (but from a low base), and those from Ecuador increased roughly in line with the total imports.

Furthermore, the importance of organic banana exports for the three Andean countries varies tremendously (Figure 5): for Peru, virtually all banana exports to the EU are organic

¹¹ DG AGRI: Organic Imports in the EU in 2018-2020 (volume in tonnes), available at https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/farming/documents/agri-market-brief-18-organic-imports-eu-2018-19-20-data-tables_en.xlsx [accessed 29 July 2021].

¹² For the EU28, import volumes were 654 thousand tonnes in 2018, and 749 thousand in 2019 (European Commission 2020).

(more broadly, Peru's banana exports are almost exclusively organic¹³); for Ecuador, they are slightly higher than the total average, and have increased, also in line with the overall trend, from 15.7% in 2018 to 19.1% in 2020. For Colombia, the share of organic banana exports has doubled from 1.2% to 2.3% but remains largely a niche products, well below the total average of 12.9% for the EU's banana imports in 2020.

Figure 4: EU27 imports of organic bananas from partner countries and other sources, 2001-2020 ('000 tonnes and %)

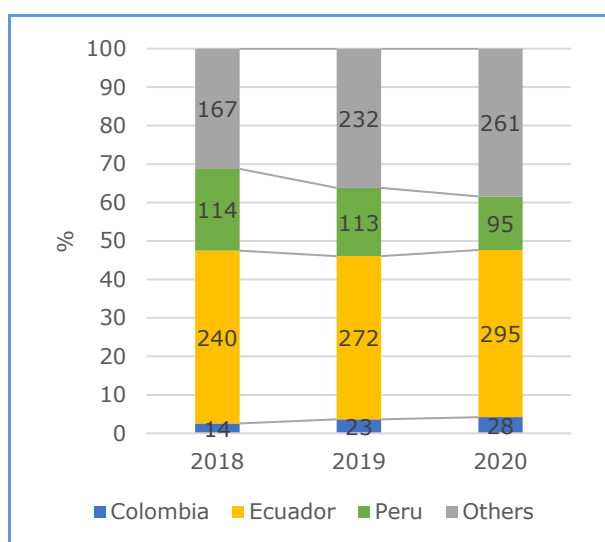
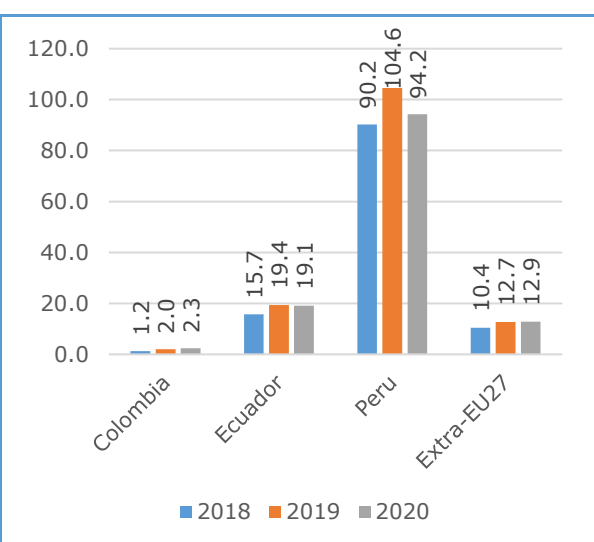


Figure 5: Share of organic bananas in total EU banana imports from partner countries and extra-EU, 2018-20 (% based on import volumes)¹⁴



Source: Authors' calculations based on Eurostat COMEXT database (total banana imports) and DG AGRI/TRACES (organic banana imports).

Exports of organic bananas from Peru started in 2000 and are mostly organised by large chains. Dole led this development through the organisation of producers into associations, as well as training, in the Valle del Chira. It is estimated that Dole has an "area of influence" of 2,500-3,000 ha (and 4,000) organic banana producers on the north of Peru; other large firms work through local representatives.¹⁵

Another statistic worth mentioning is the share of banana trade under fair trade mechanisms, which address primarily social sustainability issues. According to UNCTAD, over the last two decades, the consumption of fair trade has increased considerably, capturing approximately 10% of the market in the EU, with also dual certification (organic plus fair trade) increasing (UNCTAD 2016). For 2015, a 55% overlap between organic and fair trade due to double certification has been reported (Lernoud and Willer 2017).

2.3 Social, Labour and Environmental Situation and Issues

Issues with conventional banana production and trade are well documented.¹⁶ Conversely, studies show that the social, labour and environmental situation in certified plantations

¹³ "Organic banana production in Peru", 2017, FAO, <http://www.fao.org/world-banana-forum/projects/good-practices/organic-production-peru/en/> [accessed 25 June 2021].

¹⁴ The value above 100% for Peru in 2019 stems from the fact that data from two different sources were used.

¹⁵ "Perú ya no corre solo en la producción de banano orgánico", Redagráfica, November 2018, <https://www.redagráfica.com/pe/peru-ya-no-corre-solo-en-la-produccion-de-banano-organico/> [accessed 10 July 2021].

¹⁶ For a general treatment, see "The Problem With Bananas: Environmental, Social & Corporate Issues", BananaLink, <https://www.bananalink.org.uk/the-problem-with-bananas/> [accessed 26 June 2021]. Specifically for Ecuador, a complaint under the Agreement was submitted by ASTAC in 2019 addressing the perceived shortcomings in the sector; see "Queja de las trabajadoras y los trabajadores bananeros por violación de derechos en el marco del Acuerdo Comercial Multipartes de Colombia, Ecuador, Perú y la Unión Europea", IEE/ASTAC, available at <http://library.fes.de/pdf-files/bueros/quito/15298.pdf>.

(fair trade and/or organic certifications) is more sustainable than in conventional ones, but the differences are not always significant.

For example, a 2019 study comparing social and labour conditions on certified and non-certified banana plantations in the Magdalena and La Guajira regions of **Colombia** found that workers earned more on certified plantations, benefitted from safe grievance claims mechanisms, and had better pest management and aerial fumigation practices; however, the differences between certified and non-certified plantations were quite limited (Beekman, Dekkers, and Koster 2019).

With respect to environmental sustainability, a 2015 study undertaken in **Ecuador** found that both the carbon footprint (249 g CO₂e/kg banana) and the grey water footprint (58 l/kg) of organically farmed bananas were lower than those of conventional ones (302g CO₂e/kg banana; and 135 l/kg, respectively), mainly due to the lower amounts of nitrogen fertilizers applied in organic farming; in contrast, the amounts of water consumed per kilogram of banana at the farming stage (green plus blue water footprint) were higher in the organic farms (313 l/kg vs. 289 l/kg), mainly due to their lower yields (Roibás, Elbehri, and Hospido 2015).

2.4 Projects and Technical Assistance to Support Sustainable Farming

A number of projects to support sustainable banana production (and sustainable agricultural production more broadly) have been implemented over the past decade in the Partner countries, some of which were supported by the EU and EU Member States.

In **Colombia** examples include the following ones:

- In 2011, the Colombian government initiated an initiative to promote organic agriculture in the country, the "Organic Agriculture Production Chain";¹⁷
- The Sustainable Trade Platform Colombia, a project implemented 2012-2019 by Solidaridad Network, with funding from the Netherlands, focused on four sectors, one of which was bananas, and in that sector aimed at increasing sales of sustainably grown bananas; more efficient certification and verification; enhancing resilience against climate change; improvement of sustainable production practices; and strengthening of competitiveness of organic banana growers;
- "The Colombian National Service for Learning announced a program in 2016 to develop a smart farming system that will be used with the country's banana crops. This program incorporates internet-connected sensors to accurately monitor conditions in the fields and provides this information in a user-friendly manner to farmers. The information allows farmers to react more efficiently to the needs of these crops. Among other effects, the new information can reduce farmers' use of artificial fertilizers."¹⁸

Similar projects have also been implemented in the other two partner countries. For example, in **Peru** the Euro-Eco-Trade project, a €13 million project funded by the EU aimed to support the Peruvian strategy of promoting exports of organic produce under the Agreement (Flores 2015) . A number of public-private partnerships and CSR projects have also aimed at improving work, social and environmental conditions in the banana sectors of the partner countries, including a collaborative project between the Rainforest Alliance

¹⁷ "Sustainable Agriculture in Colombia: Three Current Projects", Paul Robertson/Borgen Magazine, 10 January 2018, <https://www.borgenmagazine.com/sustainable-agriculture-in-colombia/> [accessed 24 June 2021].

¹⁸ Ibid.

and Walmart in **Ecuador** (and Guatemala).¹⁹ Also, as part of international cooperation, a manual on health and safety at work in the banana sector in Ecuador was prepared.²⁰

2.5 Challenges

Globally, 3% of bananas produced (3.3 million tonnes out of 103 million tonnes in total) comply with sustainability standards; of these, 81% are actually sold as sustainably produced, because of demand shortages.²¹ Linked to that, “there is a concern among producers about the lack of reward for their efforts towards sustainable production [...] Furthermore, there are upfront costs of certification, whereas farmers or producers cannot always get the benefits they expect from it. They are not always able to sell their products with price premiums or incentives associated with voluntary or company-specific sustainability standards, so there’s a mismatch there between supply and demand.”²²

In Peru, challenges that have been mentioned include relatively high logistics costs for banana exports through the port of Piura, higher transport costs to the US and European markets resulting from the larger distance, increasing competition from other banana-growing countries that are expanding organic production and have larger and more cost-efficient farms (notably Colombia and Ecuador), and issues with water management²³ – while the dry climate in the north-west of the country, where the bananas are grown does not require use of pesticides but is a problem given the high water needs of the plants.

Based on a survey undertaken among more than 60 banana producers in Latin America undertaken in 2015, respondents pointed out Ecuador as being the country most affected by unfair trading practices (UTP) because of the large number of small producers in its banana sector, followed by the Dominican Republic, Colombia and Peru: “According to them, even though organic banana producers are in a somewhat better situation because of higher prices on this market segment, they are not protected from UTPs or their consequences” (BASIC 2015, 41)

Organic banana production in the partner countries confronts a number of challenges beyond the general challenges affecting banana production globally, including the decline in crop yields due to climate change and pests; for example the spread of the TR4 disease across the Andean region,²⁴ and the crop’s water footprint.

¹⁹ “Project Profile: Driving Improvement in the Banana Sector”, Rainforest Alliance, 28 June 2019, <https://www.rainforest-alliance.org/in-the-field/driving-improvement-in-the-banana-sector-project/> [accessed 24 June 2021].

²⁰ Available at <http://www.fao.org/3/I8078ES/i8078es.pdf>.

²¹ <https://comerciosostenible.org/es/sectores/banano>.

²² “Dutch Ministry of Foreign Affairs concludes educational field visit to Colombia”, Solidaridad Network, 12 October 2017, <https://www.solidaridadnetwork.org/news/dutch-ministry-of-foreign-affairs-concludes-educational-field-visit-to-colombia/>.

²³ “Perú ya no corre solo en la producción de banano orgánico”, Redagícola, November 2018, <https://www.redagricola.com/pe/peru-ya-no-corre-solo-en-la-produccion-de-banano-organico/> [accessed 10 July 2021]; “First organic banana cluster created in Peru”, Maura Maxwell/Eurofruit, 05 January 2021, <http://www.fruitnet.com/eurofruit/article/183907/first-organic-banana-cluster-created-in-peru> [accessed 14 July 2021].

²⁴ “Andean banana nations back Global Alliance Against TR4”, Maura Maxwell/Eurofruit, 11 May 2021, <http://www.fruitnet.com/eurofruit/article/185191/andean-banana-nations-back-global-alliance-against-tr4> [accessed 14 July 2021].

3 IMPACT ASSESSMENT: HOW THE AGREEMENT HAS INFLUENCED SUSTAINABLE FARMING OF BANANAS IN COLOMBIA, ECUADOR AND PERU

3.1 Trade and Economic Effects

As the results of the partial equilibrium analysis show (Figure 6), exports to the EU and total output of bananas have increased in all three Andean partner countries because of the Agreement's tariff preferences and TRQs granted: bilateral exports are between 8.9% and 15.7% higher than they would have been without the Agreement, and output between 1.7% and 4.5% higher. These estimates apply to bananas overall, i.e. conventional and organic ones. While it is not possible to disaggregate between the two, considering that the tariff preferences do not distinguish between organic and conventional bananas, it is plausible to assume that both types of bananas have benefited in the same way. In the case of Peru, since practically all exports of bananas are of the organic variety, the positive effect by definition benefited the production and increase of organic bananas.

This might sound surprising considering that exports of bananas from Peru to the EU have actually not increased since 2013 (see section 2.2 above). What the model results mean is that these exports would have declined (even more) in the absence of the Agreement. This can be explained by the competitive disadvantages compared to Colombia and Ecuador which banana production in and exports from Peru face, as mentioned in section 2.5.

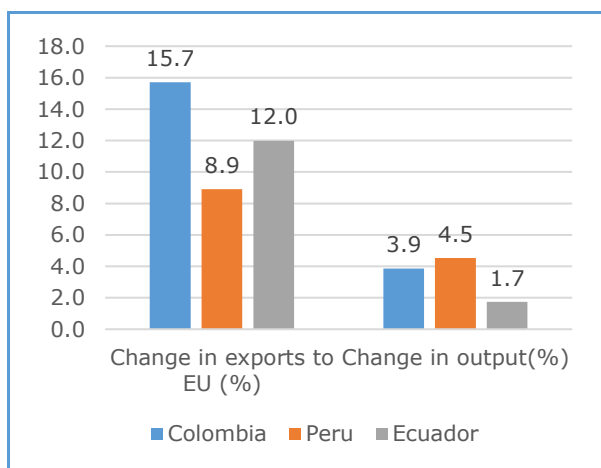
In Colombia and Ecuador, given that the shares of organic bananas in exports to the EU are more limited (at roughly 2% and 20%, respectively; see Figure 5 above), the benefits of the Agreement's tariff preferences for organic bananas are also likely to have been more limited.

However, additional benefits for organic agriculture could have been realised through technical assistance and other measures promoting this sector. In this context, we find that projects to support organic production were carried out both before and since the Agreement started to be applied. No data are available to measure whether the number or scope of such projects expanded as a result of the Agreement. Interviewed stakeholders also were uncertain if the range of projects had increased. Documents aimed at promoting organic agriculture typically do not refer to the Agreement.²⁵ It is therefore impossible to conclude whether, through projects and technical assistance brought about by the Agreement, the use of organic practices has been promoted.

3.2 Social, labour and environmental effects

Given the slightly positive effects on organic banana production in the partner countries, commensurate social and environmental effects can be expected. These would have to be seen in the context of the global sustainability trends in the banana market taking place

Figure 6: Impact of Agreement on partner country exports to EU and output of bananas



Source: Authors' calculations using GSIM model; see section 6.9.2 of main evaluation report.

²⁵ E.g. FOLU Colombia (2019): Hoja de Ruta para la Nueva Economía de la Alimentación y Use del Suelo, Bogotá: Coalición para la Alimentación y Use del Suelo, September 2019.

irrespective of the Agreement. Through the increased exports, the Agreement has likely contributed to intensify the evolving worldwide trends.

Interviewed stakeholders were divided over the environmental effects of the Agreement stemming from promotion of organic agriculture. Some stakeholders, including laboratories providing analysis of residues in food products and banana producer associations, stated that they had not seen any trend towards more organic production or major investments into organic agriculture triggered by the Agreement. On the other hand, other stakeholders noted that the EU, in the context of the Agreement but also through its overall policies, has put environmental pressure on the sector, asking that suppliers of fruits move towards carbon neutral production, find alternatives for plastic packaging, etc., and have therefore fostered the trend towards organic production of bananas and other fruit.

A similar reason applies to social and labour issues: the Agreement's impact is slightly positive due to the expansion of exports, from which also fair trade certified bananas, which provide for somewhat higher wages and better working conditions than conventional production. However, the extent to which the Agreement provided a special incentive for producers to switch to certified production, or investors to engage in such production, is difficult to determine. Preferences under the Agreement have not had any such effect; the promotion of CSR/RBC practices as part of the TSD-related discussions, as well as technical and financial support provided by the EU and some of its Member States are likely to have had some effect, but the scale appears to be rather limited.

4 CONCLUSIONS AND RECOMMENDATIONS

Although the preferences provided under the Agreement have had a positive on exports and production of organic bananas in the three Andean partner countries, they have not benefited organic production more than proportionately compared to conventional bananas. This should not come as a surprise, considering that the preferences granted are "blind" with regard to the means of production, i.e. there have been no incentives in the Agreement to switch from conventional to organic production. Collaboration under the TSD Title has addressed issues of environmental and social sustainability as well as the comparative benefits of organic production, but has remained rather general given the lack of specificity in the Title (also see the analysis in the main evaluation report). And although assistance has been provided to the sector both by the partner governments and supported by the EU and some Member States, this was mostly at project level with limited coverage.

This conclusion of a slightly positive impact on organic banana production in the Andean partner countries can be considered as a satisfactory outcome based on the policies in place at the time of the Agreement negotiations. Looking forward, however, one needs to consider the development of new EU policies, in particular the Green Deal and the Farm to Fork and biodiversity strategies. Keeping in mind that organic production has a lower environmental footprint, from the perspective of continued policy coherence the new EU policies call for a higher priority in the implementation of the Agreement to foster organic production of bananas (and other commodities), focussing in particular on the challenges confronting the sector through financial and technical support. More fundamentally, the EU should consider, in new trade agreements being negotiated or those being modernised, to provide differential preferential treatment for organically produced goods (e.g. by setting lower tariffs or specific tariff rate quotas for certified products).

From a social perspective, a similar argument can be made: in line with the EU's commitments towards the social components of the SDGs, enhancing social and labour benefits granted in principle by certified production under fair trade regimes and other arrangements is called for.

One instrument with which environmental, social and labour challenges can be partially met (which is not a part of the Agreement itself) is the adoption of Voluntary Sustainability Standards (VSS). The criteria for VSS-compliant production include soil conservation, the application of integrated pest management measures, and the determination of minimum and living wages for workers. On the demand side, VSS-compliant bananas are produced and marketed as such, and the buyers' sourcing commitments are driven by end consumer preferences to purchase more sustainable and healthy products. Thus, additional awareness-raising efforts are needed to expand the demand from such consumers in the EU. Considering that the Agreement has led to an increase in banana exports from the partner countries, it is desirable that the increased demand is satisfied by VSS-compliant bananas. The promotion of dual certification by producers in the partner countries, but also taking measures to foster demand for organic products from the partner countries in the EU, are recommended.

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CASE STUDY 4 – CHANGES IN INFORMAL EMPLOYMENT IN SELECTED SECTORS IN COLOMBIA, PERU AND ECUADOR INVOLVED IN EXPORTS TO THE EU

1 INTRODUCTION

According to a definition used by the ILO, the informal economy is understood as enterprises and workers (including self-employed) not covered or insufficiently covered by formal arrangements. Informal sector means enterprises which have not been registered and usually do not comply either with the domestic legislation related to payment of taxes, and social security contributions, or working conditions, e.g., minimum wages or health and safety at work and others. Informal employment relates to situations where a person is not offered a written contract, social security contributions (e.g., to a pension scheme or health care) are not paid, wages are usually low and there are no protections related, e.g., to unemployment, illness, or accidents at work. (ILO, 2015).

To encourage transition of informal jobs and enterprises to the formal economy, the ILO suggests a range of policies and measures including using the opportunity of increased trade flows (e.g., pursuing export promotion, providing advisory services for MSMEs to develop their exporting capacity, and supporting their inclusion into the value chains of exporting sectors) (ILO, 2015).

Such measures are in line with the ILO Recommendation No. 204 (2015) “Transition from the Informal to the Formal Economy”, which suggests initiatives in areas incl. trade, taxes, business environment, employment, education, skills development, business and financial services, access to markets, infrastructure and technology, governance and targeted actions facilitating operation of MSMEs. On the other hand, the ILO highlights that increased competition on the market (being a result of the reduction of tariff and non-tariff barriers) may increase outsourcing of certain services or processes and sub-contracting at low cost, thus leading to increased levels of informality (ILO, 2014; 2015).

Guided by the ILO definition above, and the initial research regarding informal economy and informal employment in Colombia, Peru, and Ecuador (see Annex C-1 of the main report), in this case study we look at a few selected sectors in each partner country benefitting from tariff preferences and / or playing an important role in exports to the EU, and changes in employment levels and types of jobs in these sectors over time. This is with a view to conclude if the Agreement might have contributed to changes in informality levels in partner countries and in particular, if it may have contributed to a creation of formal jobs in the analysed sectors.

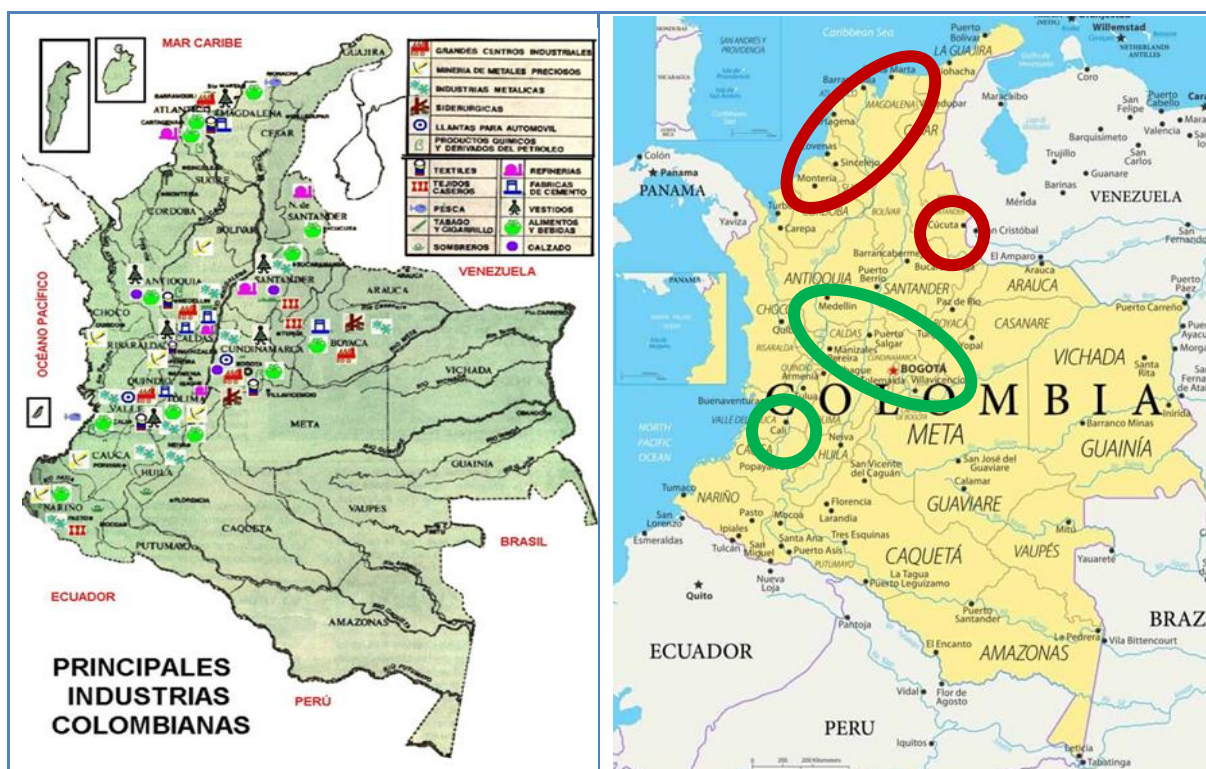
2 CURRENT SITUATION AND OVERALL IMPACTS ON INFORMALITY IN PARTNER COUNTRIES

All three partner countries have taken several initiatives in the analysed period (described in detail in Annex C-1 of the main report) to reduce the levels of informality in the economy (through facilitation of formalisation of enterprises) and employment.

Thanks to these, the overall level of informality in **Colombia** decreased from 68.5% in 2010 to 59.9% in 2020. In 13 metropolitan areas (i.e., excluding agriculture, where the informality rates are the highest), 57% of economically active persons were in informal employment in 2017 (55.5% among men and 58.8% among women). Since then, the rate of informal employment continued falling to 46.4% in 2019 (44.1% among men and 49.1% among women) (DANE, 2007b; 2019a). In addition, over the analysed period, the number

of formally registered enterprises grew (e.g., between 2018 and 2020, 84,724 formal enterprises were established) and so did the number of companies that reported formal book-keeping (information provided for the study by the Ministry of Labour). Regarding territorial break-down (Figure 1), the lowest informality rates were in 2007 and 2019 in the metropolitan areas of Bogotá (capital), Medellín (department of Antioquia), Manizales (Caldas), Tunja (Boyacá), Pereira (Risaralda) and Cali (Valle del Cauca); the highest in Cúcuta (Norte de Santander), Sincelejo (Sucre), Santa Marta (Magdalena) and Montería (Córdoba), the last three on the north coast, belonging to the poor regions in Colombia (DANE, 2007b; 2019a).¹ It is to note that measuring the level of informality only based on rates in metropolitan cities (as above) does not provide an accurate picture of the situation in the whole country (given high levels of informal employment and informal economic activity in rural areas and agriculture, which have been omitted in Colombian statistics). It is possible though to draw preliminary conclusions based on this analysis.

Figure 1: Spatial distribution of informality in Colombia



Key: Red shape – regions with a high level of informality Green shape – regions with a low level of informality
Sources: Proyecto Mapamundi: <https://proyectomapamundi.com/americadel-sur/colombia/> (right panel); Plataforma virtual ciencias sociales: <http://pvcsalicia.blogspot.com/2016/03/a-continuacion-encontraran-un-taller.html> (left panel)

Factors contributing to observed trends at the beginning of the analysed period included economic growth supported by monetary and fiscal policy, a reduced inflation rate, a more balanced budget and improved tax system enabling provision of social policies, job creation (notably in services sector) and poverty reduction. At the same time, informality reduction was relatively limited because high productivity sectors (e.g., mining, or financial services) had a low share in employment while those with low productivity (agriculture, trade, hotels and restaurants and services) had a high share (ILO, 2014a).

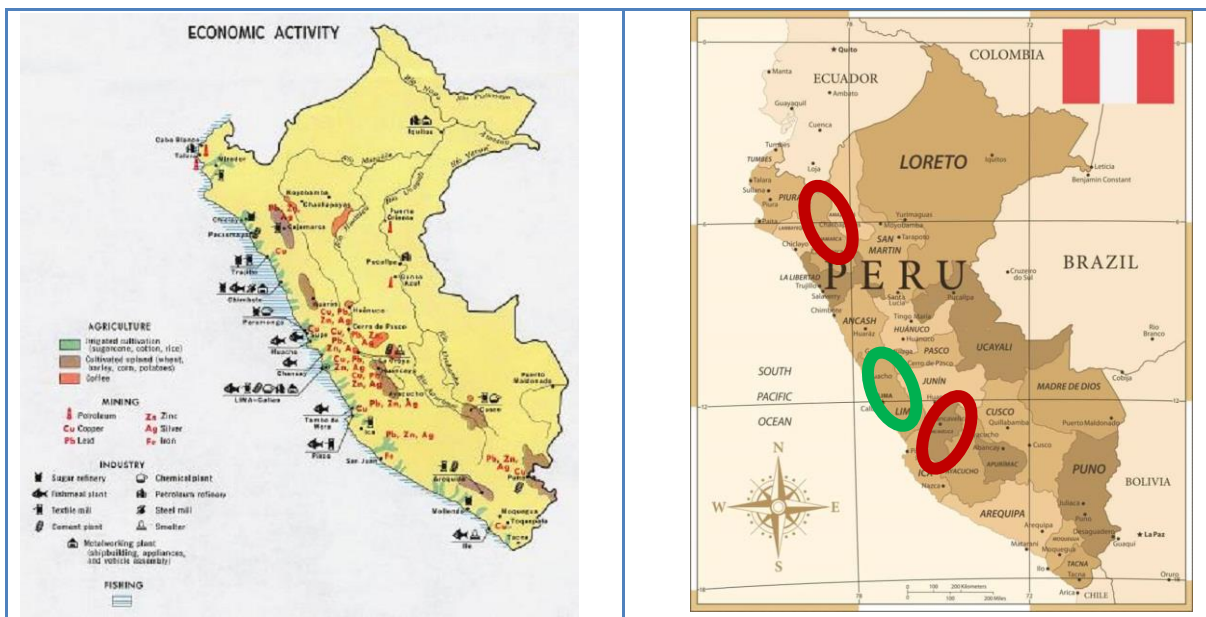
¹ Between 2007 and 2019, informality level decreased from 74.4% to 72.1% in Cúcuta, from 70.6% to 60.4% in Montería, from 58.6% to 56.5% in Pereira, from 57.7% to 46.3% in Cali, from 50.8% to 41.4% in Medellín, from 53.8% to 39.3% in Manizales, and from 52.3% to 39.1% in Bogotá (DANE, 2007b and 2019a).

Looking at patterns of economic activity in a territorial break-down, departments of metropolitan areas with an overall low informality rate host refineries, cement factories, metal industry, chemicals, mining of precious metals, pharmaceuticals, textiles, apparel, footwear industry, and food processing. Agriculture in these regions includes vegetables, fruits and nuts, animal breeding, flowers, cotton, sugar cane and coffee cultivation. Regions with metropolitan areas having high informality rates host refineries, textiles and apparel production, fisheries, banana plantations, cotton cultivation, food processing, and tourism (Asohofrucol, 2018, and maps).

In **Peru**, the rate of informal employment in total employment decreased systematically over much of the analysed period, from 80% in 2007 to 72.7% in 2019 (from 83.6% in 2008 to 75.8% in 2019 for women, and from 75.7% in 2008 to 70.3% in 2019 for men) (AA, November 2020, INEI, 2020b).

In the regional overview, the share of informal employment varied in 2019, from 92% in Huancavelica and 87.9% in Cajamarca to 60% in Lima (INEI, 2020b). Economic activities in regions with low informal employment levels include mining, refineries, metal processing, cement plants, chemical industry, textiles, cultivation of fruits, vegetables, nuts, sugar cane, cotton, and rice. In regions recording high informality levels, economic activity includes mining, cultivation of wheat, barley, corn, and potatoes, and animal breeding. Overall, lower rates of informal employment are recorded in the coastal areas thought to be most competitive, while the highest in the mountain regions that record also high poverty levels.

Figure 2: Economic activity and selected regions with informal employment in Peru



Red shape – regions with a high level of informality; **Green shape** – regions with a low level of informality

Source: Proyecto Mapamundi: <https://proyecomapamundi.com/americadel-sur/mapas-de-peru/>

Mapa económico del Perú: <http://perumipais.com/wp-content/uploads/2019/02/produccion-peru-mapa.jpg> (left)

Factors supporting a decrease in informal employment included economic growth, fiscal and monetary policy limiting inflation rates and reduced public deficit, favourable terms of trade resulting in investment flows, social policies aimed at poverty reduction, strengthened surveillance of enterprises through introduction of electronic submission of data related to workers, contracts, wages, taxes and social security contributions, and a reduction and simplification of fiscal burden imposed on SMEs (ILO, 2014d). Moreover, according to the Government, in 2018 and 2019, technical regulations (resolutions) were

adopted tasking the labour inspection services (SUNAFIL) with actions aimed at the formalisation of work in urban and rural areas.²

As discussed in section 6.1 of the main report (employment impacts), the economic modelling estimates that an increase in output and employment in Colombian and Peruvian sectors benefitting from tariff reductions in the EU has taken place. In addition, exports have increased in sectors which had tariff free access already before the Agreement, e.g., chemical products. The analysis of geographic coverage of certain economic activities, including agriculture and industrial sectors in Colombia and Peru suggests that in both countries sectors benefitting from the Agreement are the same as those located in regions with low levels of informality already prior to the Agreement's entry into force and decreasing over the analysed period. According to the literature and data, these regions have a more diversified economy, are more competitive, better connected to the world and more exposed to international trade than the rest of the country (for further details, please see Annex C-1 of the main report).

On the other hand, imports from the EU in the two countries do not appear to have affected informality levels in Colombia and Peru, probably because these imports mostly concern products, such as pharmaceuticals, vehicles, or machinery, which do not compete with the informal sector. Moreover, changes in employment in these sectors in Colombia and Peru which have been caused by the Agreement do not seem to have contributed to a shift of workers to informality. As noted above, the level of informality decreased in Colombia from 57% in 2007 to 46.4% in 2019, and the share of informal employment in industry in total informal employment decreased from 16.5% in 2007 to 12% in 2019 (DANE, 2019a and 2007c). In Peru, the share of informal employment in total employment decreased from 80% in 2007 to 72.4% in 2018, and the share of informal workers employed in industry in the total informal employment decreased from 10% in 2007 to 8.2% in 2017. Moreover, the overall level of informality in the manufacturing industry in Peru decreased from 72.1% in 2008 to 61.9% in 2018 (INEI, 2018d; 2019). An additional case study at the end of this section analyses more in detail changes in employment levels and types of jobs in a few chosen sectors in Colombia and Peru involved in exports to the EU.

In **Ecuador**, the rate of informal employment³ fell from 81.1% in 2007 to 67.1% in 2014 to increase again to 72.9% in 2018, with a change from 93% in 2007 to 89% in 2019 in rural areas and from 75% in 2007 to 66% in 2019 in urban areas. For men, the level of informality fell from 81% in 2007 to 74% in 2019 and for women, from 80% in 2007 to 74% in 2019 (CEPAL, 2020).

In a territorial overview, within each of the three big regions (coast, mountains and east), there have been departments with both, low and high levels of informality (see the map above). In the coastal region, the department of Guayas recorded a reduction in informality from 81% in 2007 to 69% in 2019. In Manabí, informal employment decreased from 88% in 2007 to 82% in 2019. In Santo Domingo the level of informality increased from 82% in 2007 to almost 90% in 2009 and after decreasing to around 72% in 2014, arrived at 82% in 2019. In Esmeraldas, informal employment started at 82% in 2007 and after a period of fluctuation between 70% and 80% finished at 84% in 2019. In the mountains, the department of Pichincha had a clearly lower level of informal employment than the others during the whole reporting period, recording a decrease in rates from 70% in 2007 to 54% in 2019. Carchi, Cotopaxi, Bolívar, Chimborazo recorded values between 83% and 90% in 2007, and between 83% and 94% in 2019. In the eastern part of the country, Napo recorded similar values (83%-84%) at the beginning and at the end of the analysed period,

² According to the Government, this led to the formalisation of 206,623 workers in 2020-2021, primarily in agriculture (71,022), followed by services (46,127), industry (27,605), construction (14,533), and wholesale and retail trade (13,802). By region, the highest number of formalised workers were in Lima (112,669).

³ Definition used in this context by CEPAL (providing data quoted here) considers a person as being in informal employment if that person does not have a formal job contract and does not pay social security contributions.

however, managed to reduce the rate of formal employment in the years of economic growth (going down to 55% in 2012) (CEPAL, 2020).

Figure 3: Economic activity and regions with informal employment in Ecuador



Red shape – regions with a high level of informality; **Green shape** – regions with a low level of informality
 Source: Proyecto Mapamundi: <https://proyectomapamundi.com/americadel-sur/ecuador/> (right) Mapa Owje: https://mapas.owje.com/1938_mapa-de-actividad-economica-de-ecuador.html (left)

Economic activity in Ecuadorean regions with lower levels of informality includes refineries, cement factories, textile, pharmaceuticals, beverages and food processing and agriculture covering banana, cocoa and coffee plantations, sugar cane, rice, potatoes, cereals, corn, and animal breeding. Those with high levels of informal employment host fisheries and fish processing, and cotton, banana, cocoa, and coffee plantations, and therefore have a relatively less diversified economy, focused on agriculture and fisheries.

The observed positive trends in the first few years of the analysed period may result from the introduction of new legislation related to formalisation of labour relations, e.g., reduction of sub-contracting, requirement of social security contributions payment by construction companies working on public contracts, and strengthening the labour inspection capacity with an increased number of inspectors and inspections. Moreover, the new Constitution prohibited precarious forms of employment (e.g., hourly contracts and work intermediation) and the subsequent legislation introduced fines for avoidance of payments of social security contributions and extended social security coverage schemes (e.g., health care insurance) to family members of covered workers. This increased the number of workers with access to the social security system receiving benefits. Economic growth, creation of formal jobs, as well as increased public expenditures on education (supporting skills development) and social transfers for poor families may also have played a role (ILO, 2014f).

On the other hand, the increase in the informal employment rate since 2014 may be related to economic recession caused by the fall in the price of exported oil (in the same period, statistics record an increase in unemployment, reduced in 2017 by public expenditures in the pre-election period, as well as substandard employment, with payment below the minimum wage level and the number of working hours per week lower than 40 despite the willingness to work full time). Other reasons mentioned in the literature include migration from rural to urban areas, and from other countries in the region, notably Venezuela (foreign workers are often ready to accept low quality jobs), relative rigidity of the labour market regulation and the related increase in labour costs, the recent growth in the provision of services based on digital platforms, and pessimism among workers who remain in unsatisfactory jobs and don't seek better options, as well as reasons related to personal

or family situation (e.g., being made redundant) (Arias, 2019; Cordes, 2020; Comercio, Jan 2019 & 2020; Primicias, Jan 2020).

The economic modelling estimates that the Agreement has led to an increase in Ecuadorean exports to the EU mainly in the sectors of vegetables, fruits, and nuts, but also vegetable oils and fats, crops, fisheries, and other food products, while industrial products are estimated as recording more modest growth. Moreover, as discussed in sections 6.1 (employment impacts), and 6.3 (impacts on women) of the main report, positive changes in employment and output related to the Agreement have been estimated for sectors such as vegetables, fruits, and nuts, cereals, fisheries, other food products, apparel, and metal products. Other sectors may have experienced a reduction in output and employment due to the Agreement, or a slower increase in case of growing sectors. Given that exporting sectors benefitting from trade with the EU thanks to the Agreement (mainly agriculture and fisheries) are in both groups of provinces, i.e., with high and low informality rates, both groups may have benefitted economically and in social terms thanks to the Agreement. Further analysis follows in the case study.

3 OVERVIEW OF INFORMALITY LEVELS ACROSS SECTORS EXPORTING TO THE EU

In sectors that have been involved in exports to the EU and those that benefitted from tariff reductions, in **Peru**, the number of workers covered by the special regime for agro-industry and promotion of agriculture employed by exporting enterprises, including those exporting to Europe, increased from 182,552 in 2008 to 276,403 in 2017, i.e., by 93,851 persons (literature also speaks of 333,368 in 2017). At the same time, the total number of people working in agriculture in Peru increased from 3,970,673 in 2008 to 4,080,009 in 2017, i.e., by 109,336 persons and the number of hired workers in the sector increased from 715,127 to 902,733 persons, i.e., by 187,606 persons⁴. In relative terms, it means that the number of people employed in jobs under the special regime, which are formal, although for most of the analysed period with less favourable working conditions than the rest of the economy, increased from 4.6% of the total number of people working in agriculture to 6.8%, and their share in the total number of hired workers in the sector went from 25.5% to 30.6% (Maldonado Mujica 2020). Therefore, exports in agricultural products, including those to the EU, are likely to have played a role in the increase in formal employment in the agriculture and agro-industry in Peru (as mentioned in section 6.1 of the main report, the Agreement is likely to have contributed to an employment increase in Peruvian agriculture, including by 1.3% in vegetables, fruits, and nuts sector). However, as mentioned above, for most of the analysed period, rights of workers under that regime were lower than in the rest of the economy and improved only by changes introduced in 2019 and 2020. Only then it was decided, e.g., that the number of days for holidays will increase from 15 to 30 annually, the contribution to health care insurance will increase from 4% of wages to 9% in 2029, the daily wage will increase by 8% and the compensation in case of arbitrary dismissal will increase from 15 to 45 daily wages for each year of service, up to 360 in total (instead of 180) (El Comercio, December 2020; La pasión por derecho, December 2020). An effective implementation and enforcement of the new law, including by labour inspection services will be important. In our interviews, stakeholders raised the issue of non-respect by some companies, e.g., in the avocado sector of minimum wage levels, in addition to non-payment for overtime, long working hours, strict security rules on farms, and controls allowing workers to have breaks for toilet or drinking water only at pre-set times and under control of guards. To address issues related to poverty and high levels of informality, the EU has been funding a project implemented in the coffee supply chain in Peru supporting formalisation of rural workers in the sector, in particular

⁴ Other job categories in agriculture include independent workers and non-remunerated family members.

women and young persons. The project forms part of a broader effort helping small-scale farmers and workers to organise into associations or cooperatives.

According to 2016 data, the textile and garment sector in Peru, incl. cotton cultivation, provided jobs to some 400,000 persons⁵ (2.5% of the total employment in the country). Cotton cultivation was pursued by 8,425 farms, 60% of which did not exceed 5 hectares, which means that small-scale family farms played an important role in the sector. Since the year 2000, however, the area used for cotton cultivation had decreased considerably due to low prices, a competition of cotton fibre and fabrics from Asia, the 2008-2009 financial crisis, which led to a reduced demand for Peruvian cotton, and the lack of public policy and support that would encourage further development of the cotton value chain in Peru (e.g. by focusing on high quality fabrics and identification of market niches where Peruvian products would be competitive). In 2016, some 80% of the workforce⁶ in the cotton sector was informal and included short-term workers hired for the cotton harvest. These workers usually earned less than the minimum wage and did not have social security coverage (ILO, Agencia Brasileña de Cooperación, 2016). In 2019, the textile and garment sector continued to offer direct jobs to 400,000 persons⁷ (equalling 26.2% of the employment in manufacturing and 2.3% of the total employment in the country) and generated 900,000 indirect jobs. The level of informality was at 78.1%, while among workers in microenterprises accounting for 80% jobs in the sector, the level of informality was at 88.7%. Garment production had a 76.3% share in the employment in the sector, with textile taking 23.7% (IESS, 2021). In 2018, Peru signed a cooperation agreement with Brazil aimed at the exchange of good practice to learn from the Brazilian experience in promoting decent work in cotton value chain, including poverty reduction, formalization of work, health, and safety at work and social dialogue (El Comercio, December 2018). As mentioned in section 6.1 of the main report, the Agreement is estimated to have contributed to an 0.3% employment increase in the garment and textile sector. Given the overall employment in the sector in 2019 equalling 400,000 direct jobs (IESS, 2021), the effect of the Agreement would lead to the generation of some 1,200 jobs or protection of the same number of jobs against a trend of decreasing employment. It is more difficult however to draw conclusions on the nature of jobs (formal or informal), given the high informality rate in the sector. It may be the case that a mix of formal and informal jobs benefitted from the Agreement in different occupational categories along the value chain. In such a case, exports to the EU would help create or preserve jobs and reduce poverty, or prevent some workers from falling into poverty, given the decreasing employment trend in the sector.

In the mining sector in Peru, the number of direct jobs increased from 159,879 in 2010 to 214,006 in 2012, then fell in the following years to around 170,000-180,000, and rose again to 208,716 in 2019. For reasons related to competitiveness and cost cutting, the majority of work, incl. core business activities, is outsourced and therefore the majority of workers (67.9% in 2019) come from sub-contracting companies. The main employers in the sector are the regions of Arequipa, Junin and Lima (Ministerio de Energía y Minas, 2019). The sub-contracted workers usually receive contracts, and half of them (52.2% in 2018) come from the same region as the mining activity, therefore, from this point of view, the jobs can be considered formal and as contributing to regional development and employment opportunities. It is estimated that one direct job in the mining industry contributes to the generation of 6.25 indirect jobs in the country (Ministerio de Energía y Minas, 2019). However, the level of workers' rights and job security, is – according to the literature – lower for sub-contracted workers than in the case of directly employed by mining companies. Sub-contracted workers receive contracts for 2-3 months (in a survey carried out in 2020 in Junin, this were 76% of sub-contracted workers, and in Cusco 56%) and the minority (23% and 31% respectively) have contracts of 4 months and more.

⁵ Another source speaks about 422,000 jobs in 2016. (IESS, 2021)

⁶ This means an increase in informality, from 72% in 2015. (IESS, 2021)

⁷ However, in 2017, there was a short increase in employment, up to 463,300 persons. (IESS, 2021)

Moreover, they do not participate in companies' profits, and do not receive benefits for long-term service, and the short-term nature of contracts is perceived as a constraint to trade union activity, as workers fear their contracts may not be renewed if they start to organise or raise claims related to personal protective equipment or other working conditions. Workers reported also insufficient training on health and safety, long working hours and unpaid overtime (sometimes they receive days-off instead, but these are difficult to use during a short-term contract) and problems with personal protective equipment (CNV Internationaal, 2021). According to the economic modelling, depending on the sub-sector, the Agreement may have contributed to employment reduction in mining ranging from 0.1% in minerals to 0.8% in metals. In illustrative terms, this would mean 214 to 1,712 jobs less in total, in the analysed period. However, given the increase in exports and employment in other sectors, such as agriculture, this may mean, at least theoretically, also a possibility of some workers moving to the growing sectors against the fall of global prices for extractive commodities and the overall downturn trend in the mining sector in Peru and the neighbouring countries. In terms of effects for informality levels, a shift of workers to agriculture for jobs under the special regime would mean no change, as those jobs are also formal, although of a low quality. Other changes, incl. a job loss and a subsequent uptake of another activity could mean a marginal or very limited increase in informality in the economy, however, not in the mining sector.

In the context of the above, according to the labour inspection services in Peru (SUNAFIL), an implementing legal framework has been developed with dedicated protocols for urban and rural areas, enabling inspections with a view to facilitate formalisation of work. Thanks to related activities undertaken in 2020-2021, SUNAFIL inspectors managed to formalise 202,623 workers across the country, incl. 71,022 in agriculture, 46,127 in the real estate and business services sector, 27,605 in manufacturing, 14,533 in construction and 13,802 in wholesale and retail trade. The highest number of formalised workers was recorded in metropolitan Lima (112,669).

In **Colombia**, the banana sector provides employment to some 150,000 people in 2021 (25,000 direct and 125,000 indirect jobs) (Augura, 2021). This means an increase of 3,200 jobs since 2007 (from the total of 146,800 then) (Viloria de la Hoz, 2008). While we did not manage to identify data regarding the share of formal jobs in the whole sector, there is a view of high level of formality. For example, in a survey carried out by the ILO in 2020 with a group of workers from the banana sector in Colombia, 90% of them declared to have a contract for an indefinite period and being member of a trade union affiliated to one of the trade union confederations (CUT or CTC), which suggests formal employment (ILO, 2020a). Provided that the sample reflects the picture in the sector, one could conclude that exports in bananas, including those to the EU are likely to have contributed to preserving the existing formal jobs and to a further increase in the formal employment in the sector (according to the economic modelling, in the fruits, vegetables and nuts sector, the Agreement is likely to have contributed to a job increase by 1.2%, i.e., which – in illustrative terms – would mean additional 1,762 jobs, i.e., over half of the whole employment increase in the sector between 2007 and 2021, if the number of jobs in 2007 is taken as a starting point).

In the palm oil sector in Colombia, in 2018 there were 170,794 jobs (direct and indirect in total) (Gallo et al, 2020) which means an increase by 35,443 jobs from 135,351 in 2007 (Viloria de la Hoz, 2008). According to trade unions, 80% of workers in the sector have informal jobs as they have been sub-contracted. On the other hand, the Ministry of Labour is of the view that only 20% are informal given that sub-contracted workers have labour contracts and that sub-contracting takes place in a framework envisaged by the law (Quiroz, Achterberg, Arnould, 2021). Given that according to the ILO definition, informal work means a situation without a written job contract, even sub-contracted workers who have a contract would be considered as formal workers, in particular if they are covered by social security insurance. According to the economic modelling, in the oil seeds sector, employment was likely to decrease due to the Agreement by 0.1%. However, given overall

growth trend in the sector, this may rather mean a move by some workers to other sectors, including within agriculture, or a slower employment growth than without the Agreement. In illustrative terms, the Agreement would impact some 135 jobs, while the nature of those jobs (formal or informal) is not entirely clear.

The mining sector in Colombia offers in total between 150,000 and 350,000 direct jobs and almost 1 million of indirect ones, according to data from 2019⁸. It also belongs to sectors with lower levels of informality with 35.8% of jobs being informal in 2019 (Radio Caracol, May 2019; Actualícese, September 2019). In the coal mining sector, jobs seem to be formal, however, similar to the case of Peru, a substantial number of workers is sub-contracted. In three chosen companies, the share of sub-contracted workers varied between 47% and 66%. The sub-contracted workers had contracts of 3-6 months and some up to one year. They also used to receive lower salaries than directly employed workers and did not take part in other benefits. It is also reported that trade unions in the sector represent direct workers but not sub-contracted ones. Reportedly, issues with sub-contracting were raised in the context of Colombian trade agreements with the US and Canada (CNV Internationaal, 2021). While it is difficult to estimate the contribution of exports to the EU to the overall employment in the sector, due to diverging figures related to the number of jobs in 2019 in the mining sector, it is probable that trade with the EU has helped to maintain or create jobs over time. Moreover, it is most likely that these jobs were formal (according to the economic modelling, while the Agreement did not have any impact on employment in minerals, in coal it contributed to an employment increase by 0.1% and in metals, it is likely to have created additional 1.6% of jobs). However, given that around half (or more) of workers are sub-contracted, those jobs may have deficiencies in terms of quality.

In the framework of implementation of the TSD Title, the EU has supported Colombian efforts to fight labour informality through a project aimed at improving technical competence and knowledge of labour inspectors in rural Colombia to promote compliance with fundamental rights at work. The project, which was implemented by ILO, runs from 2019 to 2021.

In **Ecuador**, the tuna sector employs directly around 20,000 and indirectly 80,000 persons, according to data shared with the study team by sector representatives. The jobs are formal and workers sign a contract, with rules related to holidays, contributions to social security systems, participation in profits of their enterprise and other benefits. The companies also provide training and conditions related to health and safety at work. Given that according to the economic modelling, exports to the EU may have contributed to creation of around 2,000 jobs in the sector, one may assume that these were formal.

In the banana sector, the Government representatives claim that the regime set up for the sector was meant to contribute to formalisation of labour relations. However, data provided by trade unions suggests that in reality, there are diverse shortcomings in jobs quality and formality. In 2019, the Trade Union Association of Agricultural, Banana and Rural Workers (ASTAC) outlined in a complaint working conditions in the banana sector directly employing 200,000 workers and up to 2 million indirectly. In a survey carried out among workers in the sector,⁹ 68% did not have a formal contract and 82% of those who had a written contract had not received its copy and did not know its provisions. Moreover, 70.3% did not receive payslips and were not able to check how their salaries had been calculated,

⁸ In 2013, the mining sector employed 202,000 persons (Unidad de Planeación Minero Energética, 2014, Indicadores de minería en Colombia: http://www1.upme.gov.co/simco/Cifras-Sectoriales/EstudiosPublicaciones/Indicadores_de_la_mineria_en_Colombia.pdf)

⁹ The results were based on a sample of 117 surveyed workers of the banana sector and were considered as representative by the authors of the survey for the province of Los Ríos and as a reference for the provinces of Guayas and El Oro. The Government considers that the small size of the sample and the adopted research methods do not provide reliable results.

including extra hours (80% of workers had working days extended to 10 hours a day). Also, around half of the workers did not receive a 13th or 14th salary, and two thirds did not have holidays. Protective clothing and tools provided at the plantations were deducted from salaries, as were other (not explained) items. Tasks allocated to workers were in many cases not possible to be completed during a day, which in turn reduced incomes below the minimum wage level. Furthermore, only 49% of workers were covered by the social security contributions (contrary to the existing law which foresees penalties for no affiliation of workers to social security by their employer). In 2017 and 2018, three Ministerial Decrees introduced special regimes for temporary contracts in the banana sector reducing stability of working relations, and worsening conditions for trade union operation and collective bargaining in the sector. In addition, the requirement of having at least 30 workers to establish a trade union represented a hurdle in the sector where many enterprises are small and owners apply practices to avoid trade union activity, e.g., by dividing enterprises into parts, keeping workers without social security affiliation, creating own trade unions, using threats, etc. Finally, the use of chemicals has proved to have negative impacts on health of workers and inhabitants in the plantation areas (ASTAC, 2019). Based on the above, one may draw a conclusion that while exports to the EU may have contributed to job creation in the sector, as part of the estimated employment growth in the vegetables, fruits and nuts sector, the new jobs may not have been formal or – even if they were formal – they may have been shortcomings in terms of quality.¹⁰

In the framework of the TSD Title, the EU has been funding an ILO project aiming at strengthening the capacity of Ecuador's labour inspectorate to improve labour law compliance, focusing on the rural agricultural sector and Fundamental Principles and Rights at Work (FPRW) in collaboration with the social partners. As part of the project, labour inspection interventions in the rural agricultural sector were reviewed to systematize relevant information and challenges to promoting compliance with workplace regulations. The project included consultations with employers and workers' organizations and the development of tools, such as inspection protocols, action guides, training programs contents.

In 2019 and 2020, the EU funded a similar ILO project strengthening the technical capacity of labour inspection to promote compliance with national labour laws in the rural sector in Colombia. In Peru, an EU-ILO workshop on strategic and participatory strengthening of labour inspection was held in Lima in February 2020.

¹⁰ In its response to the complaint submitted by trade unions and data provided by ASTAC, the Government indicated that while it had not been possible to ensure an entire formalisation of the sector, the figure suggested by the survey seemed to be too high and unreliable, given a small size of the sample and adopted research methods.

CASE STUDY 5 – EXPORT DIVERSIFICATION AND SPATIAL EFFECTS OF THE AGREEMENT: THE CASE OF TROPICAL FRUIT PRODUCTION IN NARIÑO, COLOMBIA

1 INTRODUCTION

As shown in the overall analysis, the Agreement has led to a diversification of Colombian exports into new agricultural products, some of which are produced in remote areas of the country. This case study seeks to identify the causal link between the Agreement and export performance of rural areas, using the south-western Department of Nariño as an example for its great ethnic diversity. The case study first provides an overview of the current situation and recent trends in Nariño (section 2). Section 3 assesses the impact of the Agreement on the Department.

2 CURRENT SITUATION AND RECENT TRENDS

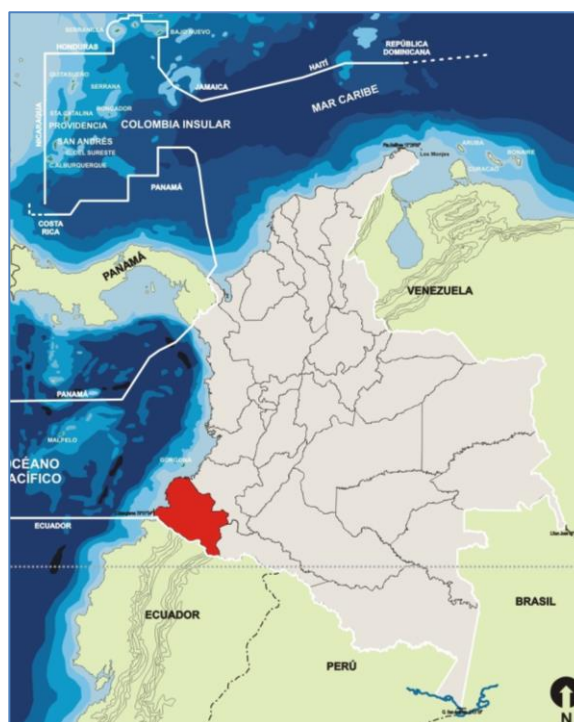
2.1 Location and population

The Department of Nariño is located in the southwestern part of Colombia, bordering to the south with Ecuador (Figure 1). It has an area of 33,268 km², representing 2.9% of the national territory. The geographical location constitutes a potential in terms of trade, given its proximity to the border, its access to the sea and connectivity with other departments. However, the location has also been a variable of territorial vulnerability given the situation related to drug production and trafficking, as well as the armed conflict, as discussed further below.

The total population of the Department in 2018 was 1.63 million, of which 352 thousand live in the Department's capital, Pasto. 56.1% of the department's population live in rural areas. This share has remained constant since 2005, indicating a population dynamic contrary to the rest of the country, which characterized by the demographic transition towards urban areas. With birth rates having declined in recent year, the Department's population is projected to stagnate in the coming years (DANE-CNVP, 2018).

One of the fundamental characteristics of the department of Nariño is its great ethnic diversity. Indigenous peoples in Nariño include cultures such as the Inga, Kofan, Awa, Pasto, Eperara, Siapidara and Quillasinga. Also, the Afro-descendant population is an important part of Nariño's population, especially in several municipalities in the Pacific region.

Figure 1: Location of Nariño



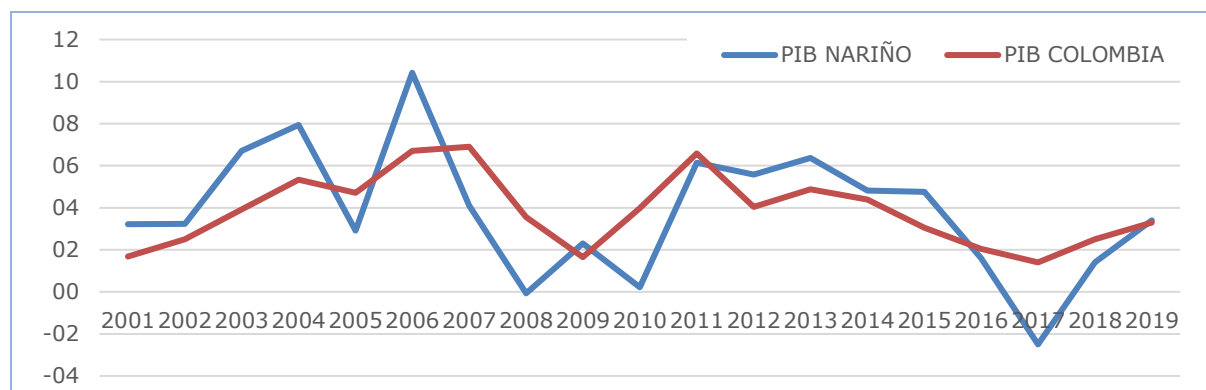
Source: Sociedad Geográfica de Colombia, <https://www.sogeocol.edu.co/narino.htm>

(DANE-CNVP, 2018).

2.2 Economic situation and developments

Nariño's economic contribution to the national GDP represents 1.5% (2017-19). Over the years, GDP has been more volatile in the Department than at the national level (Figure 2).¹ On average, growth over the years in Nariño was below the national average, but the difference was lower in the Agreement period (2013-2019, at 2.8% in Nariño vs. 3.1% nationally, than in the years preceding the Agreement (2007-2012), at 3.0% vs. 4.5%.

Figure 2: Annual GDP growth, at 2015 constant prices (%)



Source: Own preparation based on DANE. Cuentas departamentales, 2020.

The sectoral structure of Nariño's economy differs considerably from the national average (Figure 3): administration and defence (a result of the border location) as well as agriculture are substantially above the national average, at 27.7% vs. 15.1% and 15.6% vs. 6.7%, respectively, in 2019, whereas manufacturing (2.5% vs. 11.0%)² and mining (1.0% vs. 5.6%) only play a very limited role in the departmental economy.

Figure 3: Sectoral composition of GDP, Nariño and Colombia, 2019 (% of total)



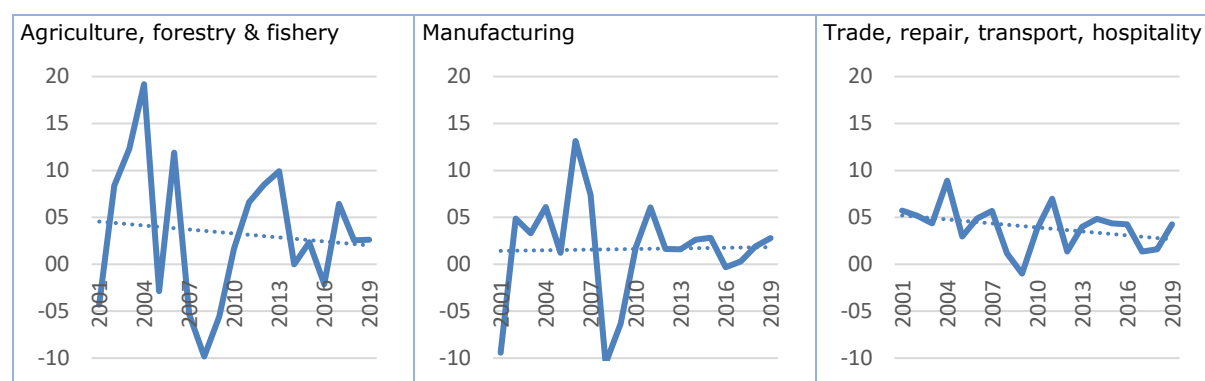
Source: Own preparation based on DANE. Cuentas departamentales, 2020.

¹ This is to be expected as the departmental economy is based on a narrower production base than the national economy, and so GDP depends on fewer products and services.

² Manufacturing essentially consists of five activities: other food products (33%), dairy products (25.3%), processed fish and meat (18.1%), milling and starch products (11.7%), and other manufacturing industries (11.8%).

The performance of selected sectors in Nariño over the years shows a slight trend towards an increase in agriculture/forestry/fishery as well as services sectors, which have witnessed higher growth rates than manufacturing activities (Figure 4).

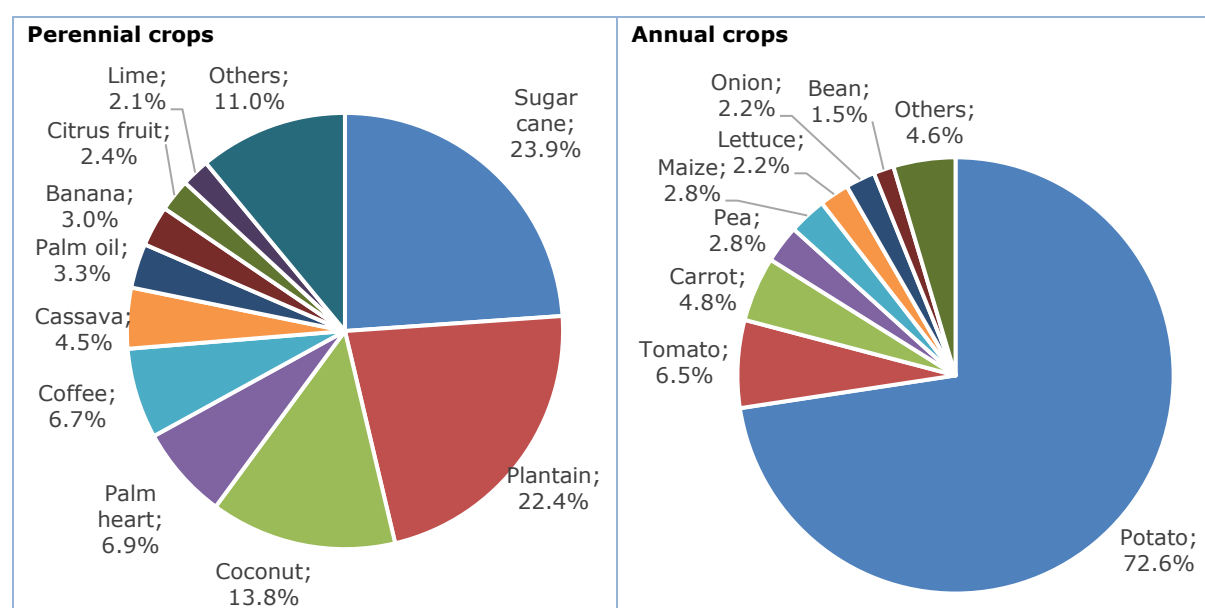
Figure 4: Annual growth of selected economic activities, Nariño, 2019 (%)



Source: Own preparation based on DANE. Cuentas departamentales, 2020.

Within the agricultural sector, the Department's output is fairly diversified (Figure 5). Among the perennial crops, sugar cane, plantains, cocoa, palm hearts and coffee together account for close to three quarters of production; among the annual crops, potatoes dominate, followed by a range of vegetables.

Figure 5: Main crops grown in Nariño, 2018 (% of total)



Source: Own preparation based on Ministerio de Agricultura y Desarrollo Rural, 2018.

In terms of the export composition, the Department's main products are coffee (33%), gold (25%), palm oil (17%), fish (15%), and citrus fruit (5%) (Figure 6). Comparing these numbers with the composition of agricultural output shows that the regional economy is mostly producing for the domestic market: none of the main crops planted – potatoes, sugar cane, plantains, cocoa – is found among the main exports. In line with this, in terms of the importance of exports, Nariño is still performing below average, but catching up: the Department's exports represented an average 0.2% of national exports between 2012 and 2019 (compared to a share in national GDP of 1.5%), but increased 15.2% between 2018 and 2019.

Nariño's main trading partners are the United States and Ecuador (Ministerio de Comercio, Industria y Turismo, 2021).

In terms of competitiveness, Nariño in 2019 ranked 20th among Colombia's 33 departments, rising one position compared to 2018 (Consejo Privado de Competitividad, 2019). The competitiveness index evaluates a set of indicators in four areas, innovation ecosystems, market efficiency, human capital and business enabling conditions (Figure 7). Among the best-ranked components for the Department is business innovation in the adoption of ICT (position 17), with the performance of financial services and higher education also performing well. On the other hand, aspects such as the business environment, sophistication and diversification, basic education, the efficiency of the labour market, market size and health show a low performance

Figure 6: Main exports of Nariño, 2020 (% of total)

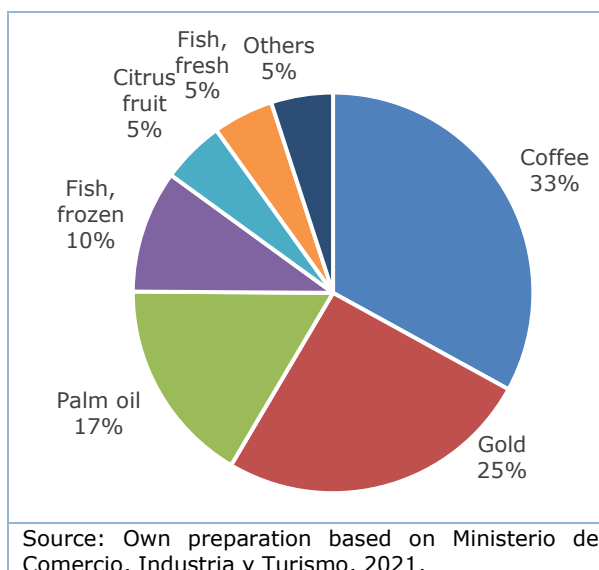
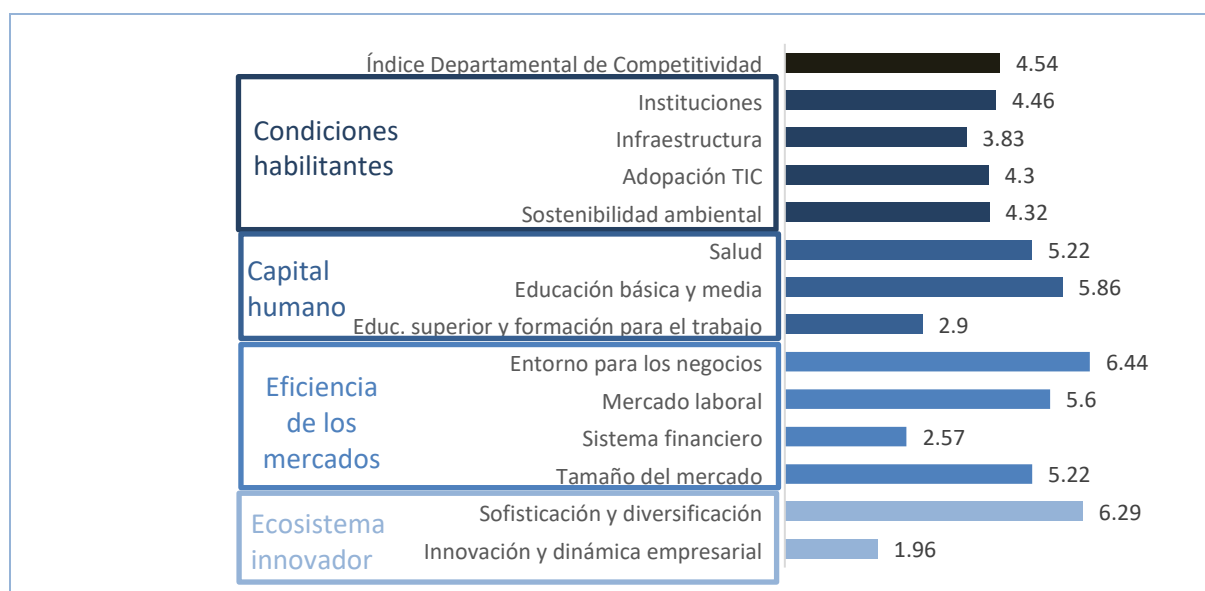


Figure 7: Nariño's scores in the Departmental Competitiveness Index, 2019 (1=best).



Source: Consejo Privado de Competitividad, 2019.

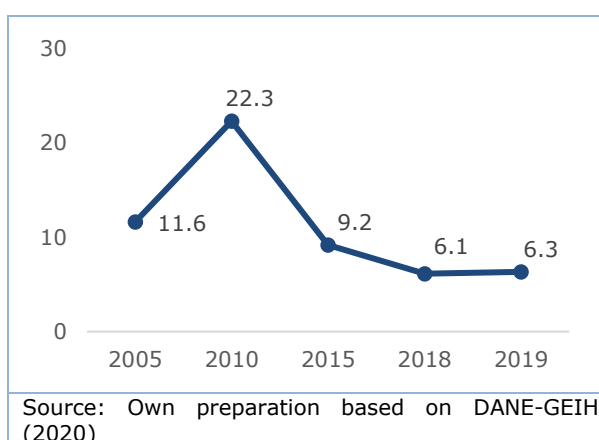
2.3 Social situation and developments

The main indicators presented here to characterise the Department's social situation and trends are employment, poverty – both monetary poverty (based on the comparison between the level of household incomes and the monetary cost of acquiring the food basket) and through the Multidimensional Poverty Index (MPI) –, inequality (measured by the Gini coefficient), and the coverage of public services.

Employment

The development of the job market in the Department has shown a significant evolution: unemployment declined from 22.3% in 2010 to single-digit levels from 2015 onwards (Figure 8). From 2015 to 2019, the unemployment rate fell further by 2.9 percentage points, which is equivalent to 25,000 fewer people without job. Although between 2018 and 2019 3,000 people were added to this condition, increasing the unemployment rate to 6.3%, this was still below the national average of 9.7% (DANE-GEIH, 2020). At the same time, the reduction unemployment has had only limited effects on the poverty situation in the Department (see below). This can partly be explained with the fact that informality, underemployment and inadequate (low wage) employment are pervasive. In addition, obstacles affecting women in the labour market in Nariño are of concern. In 2017, the gender gap in the global participation rate was 19.8%, women's non-participation rate being 39.9%.

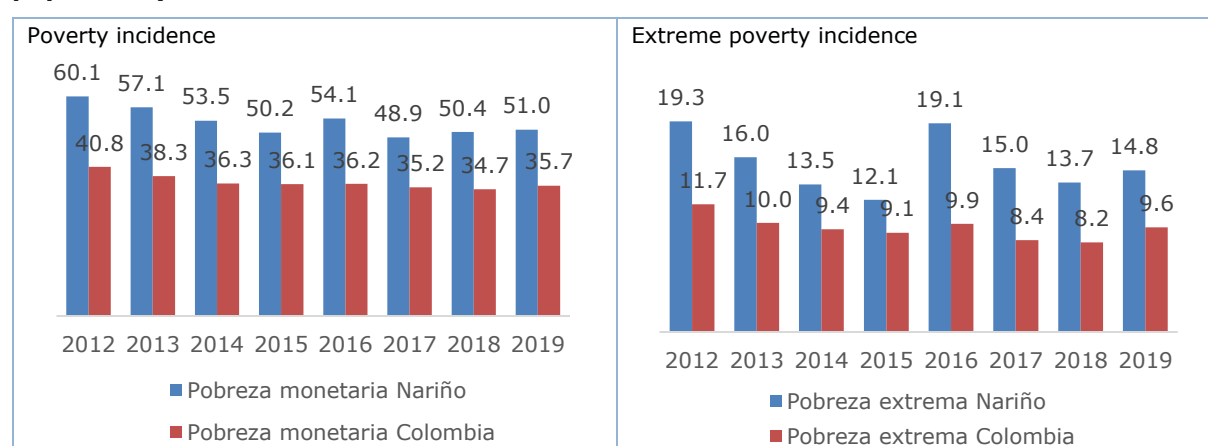
Figure 8: Unemployment in Nariño 2005-2019 (%)



Poverty

From 2012 to 2019, 79,000 people managed to get out of monetary poverty in Nariño; the poverty incidence decreased from 60.1% to 51.0% (Figure 9). Even so, in 2019 Nariño was among the nine departments with the highest poverty incidences, the national average being 35.7%. Extreme poverty in the Department (14.8%) was also above the national average (9.6%). In addition, contrary to the national trend which saw poverty reducing from 2012 to 2018 (and then increasing), progress in Nariño happened mostly during the period 2012 to 2015; since then, both poverty and extreme poverty show an increasing rate.

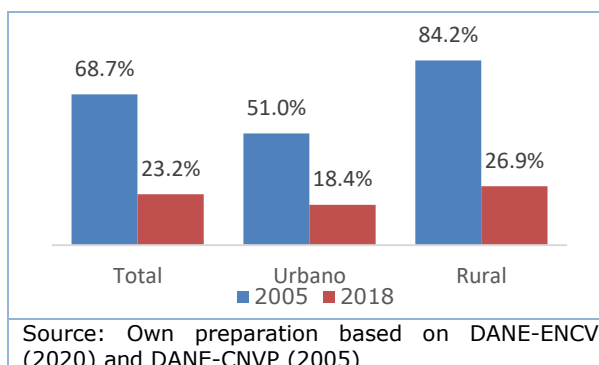
Figure 9: Evolution of monetary poverty in Nariño and Colombia, 2012-2019 (% of population)



Source: Own preparation based on DANE, 2020: Indicadores de Pobreza Monetaria.

In terms of multidimensional poverty, which also incorporates health, education and the coverage of other basic needs, according to data from the 2005 Census, Nariño's population in this condition represented 68.7% (1,023,681 inhabitants); in rural areas 84.2% were poor (Figure 10). By 2018, this declined to 23.2% (26.9% in rural areas and 18.4% in urban areas) – a remarkable achievement. Nevertheless, the Department's performance is still below the Colombian average.

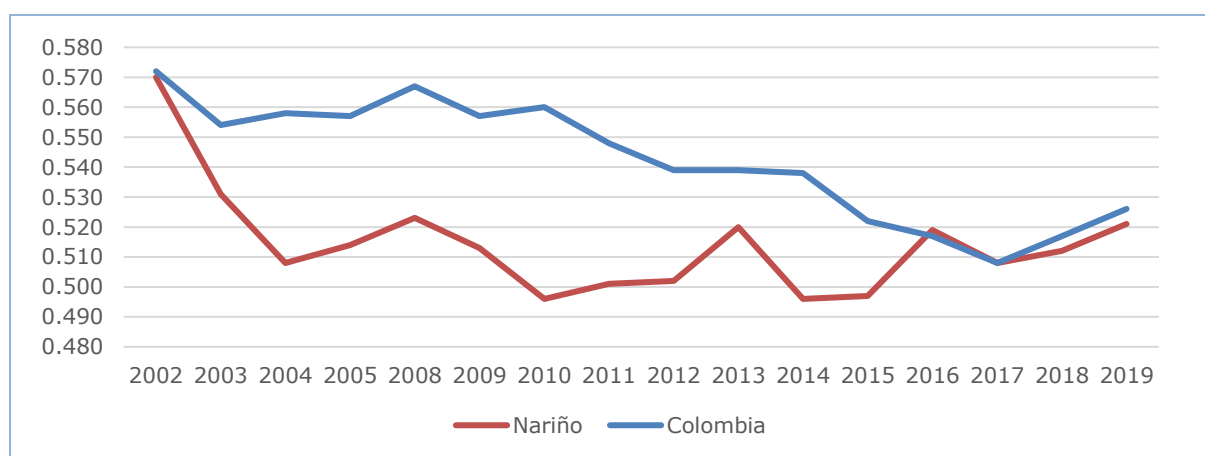
Figure 10: Multidimensional poverty in Nariño, 2018 vs. 2005 (% of population)



Inequality

The Department also shows an uneven performance regarding inequality. Although this substantially decreased in the early 2000s, and was below the national average until 2015, since then it has increased again until 2019, now being roughly at the national average again (Figure 11).

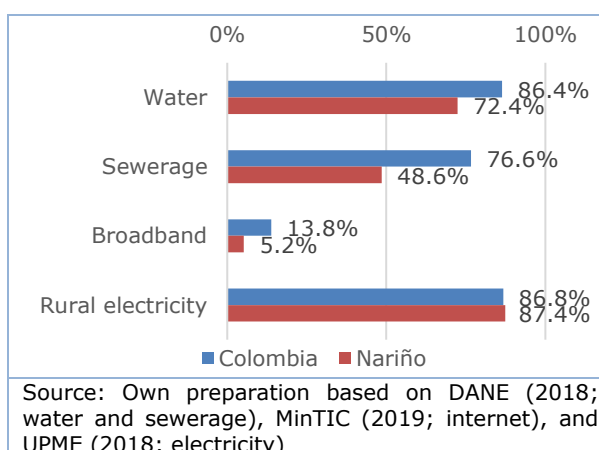
Figure 11: Evolution of the Gini Index in Nariño and Colombia, 2002-2019



Coverage of public services

With regard to the provision of basic public services, the Department has challenges in terms of electricity, water and sewerage, which are below the national average. Figure 12 compares the coverage of some public services in Nariño with the Colombian averages. It shows that, with the exception of rural electricity, the Department lags behind the rest of the country – in access to water, sewerages, and internet. Regarding the latter, broadband penetration in 2019 was 5.2%, a very low figure that has a negative impact on the development of commercial, financial and education activities.

Figure 12: Access to basic services in Nariño and Colombia (% of population)



2.4 Human rights situation and developments

In Nariño, the armed conflict and the planting of illicit crops are key issues affecting the human rights situations, causing displacements of the peasant and indigenous populations to the urban centres of the Department. Additionally, the limitation of means and decent employment has affected the population's living standards and contributed to persistent poverty.

By 2019, Nariño ceased to be the department most affected by coca crops, going from 41,903 to 36,964 hectares planted, which represents a decrease of 12%. Indeed, Nariño, Norte de Santander, Putumayo and Cauca account for 78% of all coca in the country (UNODC, 2020). To this is added the recognition of 541,182 victims of violence in the department, of which about 90% are related to forced displacement as of January 2021 (Unidad de Víctimas, 2021). The current situation has not revealed much progress despite the peace policy, since in 2020, actions of armed violence increased, mainly **affecting Afro-descendant and indigenous communities**. Thus, at least 31,834 people belonging to the Awá indigenous people are at risk from different threats, and have been affected by 21 events of massive forced displacement (OCHA, 2020).

The foregoing is related to the execution of all the activities of the drug chain within the department, which aggravate the situation of violence, displacement, and the presence of armed groups. Undoubtedly, this context shows why Nariño is perceived as a critical place in reference to violence, criminality, public insecurity and problems of coexistence.

Despite the fact that the rural sector in Nariño has a high rate of community organizations, concerns regarding **freedom of association** persist: "these communities are subject to constant human rights violations, violations of international human rights law and forced displacement generated by different armed actors who exercise military control in the areas of coca planting and processing, and in the areas of exploitation of natural resources: mining, oil exploration and agro-industrial plantations of oil palm monocultures" (Castillo Burbano & Jurado, 2014). This situation affects the development of organizational processes since the risks to integrity, the high stigmatization of the social and peasant movement and the low institutional guarantees for the protection of life, contribute to high migration and, therefore, to instability.

Due to the increasing number of forced displacements in the Department, institutional advances were made through the creation of 65 Territorial Committees for Transitional Justice as a way of implementing public policy to mitigate this problem in the region. In total, there are 46 spaces for articulation in which issues related to Human Rights are discussed (Gobernación de Nariño, 2016-2019). Additionally, for the year 2017 the Department of Nariño had 21,058 people affiliated with 186 unions. However, according to the union census of the Ministry of Labour 2017, for this year 25 union organizations were registered.

The National Trade Union School (Escuela Nacional Sindical, ENS) estimates that between 2016 and 2018 there were 6 homicides against trade unionists from the Department; one of the highest numbers across Colombia (ENS, 2020). These practices of violence not only harm the fundamental rights of people, but also affect the work of trade union organisations.

The **right to education** is also regulated as a social right in national legislation. However, the 2014 National Agricultural Survey showed that only 64.3% of agricultural producers in the Department of Nariño have basic primary studies, 7.25% attended basic secondary, 7.38% advanced to secondary education, 1.13% have technical studies, 0.30% complete technological studies, 1.13% have university studies, 0.15% have postgraduate studies, and 16.16% do not have any type of studies.

These indicators can be explained by various factors. On the one hand, the high dropout rate in basic secondary education may be related to child labour in rural areas, a phenomenon that is replicated from generation to generation and that contributes to poor preparation for productive development. Thus, "the opportunity cost of attending school increases after the age of 13, when children begin to have the strength to carry out productive and paid work as day labourers or in their own plots during harvests, or in activities such as transportation or loading"(Martinez et al., 2016).

Government plans have focused on programs for the substitution and eradication of illicit crops through incentives to promote new agricultural developments that generate sustainability for peasants and guarantee their rights.

As agriculture is the main economic source of the Department, since 2014 rural planning instruments began to be generated in order to organize communities in their food production spaces and improve their working conditions. Among these instruments are the Policy and Strategy for the Agricultural Development of the Department of Nariño (CONPES Agropecuario 3811 of 2014; DNP, 2014), the Integrated Plan for Agricultural and Rural Development with a Territorial Focus (Plan Integral de Desarrollo Agropecuario y Rural con Enfoque Territorial, PIDARET) led by the Rural Development Agency (2017), and the Productive and Social Organization Plan of Rural Property led by the Ministry of Agriculture and Rural Development with the support technician from the Rural Agricultural Planning Unit (UPRA). Although the Department of Nariño has not been specifically characterized as one of the large food producers, at the national level it is seeking the substitution of crops (including illicit ones) with a view to improving food security and encouraging the improvement of the quality of food, as well as the working conditions of growers in the area.

The **right to an adequate standard of living** and the **right to adequate food** are also under stress in the Department. The Dhana 2020-2029 Ten-Year Plan (Gobernación de Nariño, 2020) shows a complex territorial context that has limited food security. It should be noted that barriers in terms of availability and accessibility to adequate food mainly affect population groups in conditions of vulnerability. From natural phenomena such as climate change, jungle areas, and geographic dispersion, to social problems such as illegal crops and armed conflict, they hinder the effective enjoyment of the right to food. Thus, for example, the diversity of thermal floors and other geographical characteristics make some areas of the department of Nariño ideal territories for planting illicit crops that alter the biodiversity of ecosystems and increase deforestation of the forest. In addition, it is important to highlight the relationship between people's income levels and their food security, since access to the basket of food goods depends on family and personal economic capacity. Thus, according to the department's poverty indices, in 2018 Food Insecurity affected 61.9% of the population; we also refer to the levels of extreme poverty described above).

2.5 Environmental situation and developments

In Nariño, a medium-low level of natural capital predominates, taking into account that only 5.4% of the Department belongs to "strategic ecosystems", which is defined as the percentage of the territory that is part of the National System of Protected Areas (Sistema Nacional de Áreas Protegidas, SINAP) (DNP, 2017). The highest proportion of strategic ecosystems corresponds to wetlands with 21.5%, followed by páramos with 6.8%. Additionally, the Department has 32 protected areas, among which the following stand out for their extension: Sanquianga, Laguna La Cocha Cerro, Patascoy Páramo de las Ovejas-Tauso and Cabo Manglares Bajo Mira and Frontera (RUNAP, 2020).

Due to the effects of the armed conflict and the production of illicit drugs, the challenges that Nariño faces regarding environmental sustainability are high. For example, 18% of the coca that was found in 2019 in the national territory came from Forest Reserves located

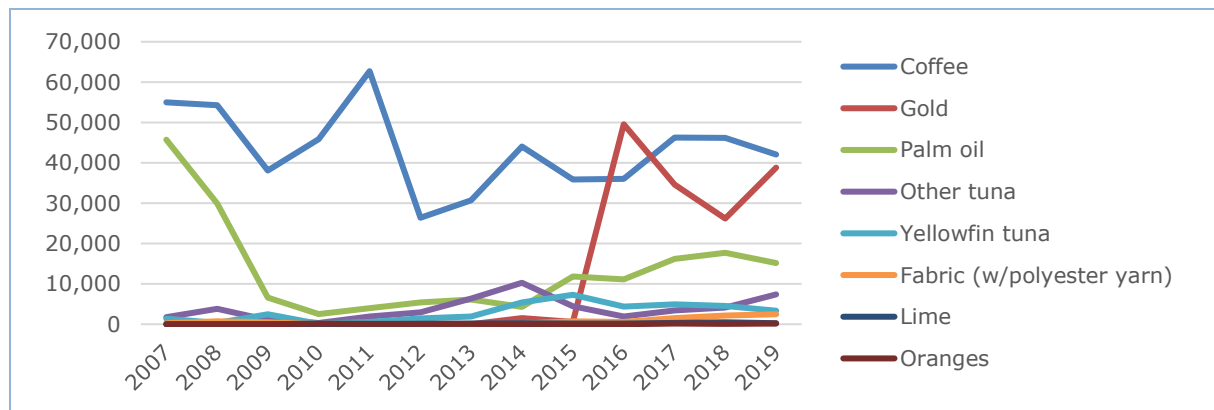
mainly in Norte de Santander, Bolívar and Nariño (UNODC, 2020). This represents a long-term risk that deepens in contexts of socio-economic fragility where the opportunities of the underground economy are greater compared to the formal economy.

3 IMPACT OF THE AGREEMENT IN NARIÑO

3.1 Main exported products

Coffee has consistently been the Department's most important export product, closely followed by gold, since 2016 (Figure 13). Neither of these two exports could have been affected by the Agreement, however, as this provides no tariff preferences for the two products – their import into the EU is duty-free in any case.

Figure 13: Main export products, Nariño, 2007-2019 (USD '000)

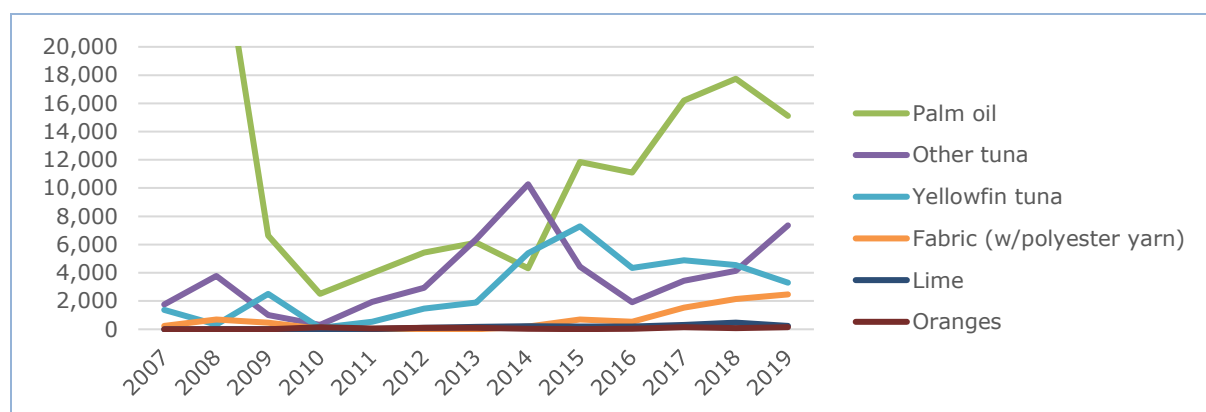


Source: Own preparation based on DANE-DIAN, 2020.

Zooming in to products of the Department where the Agreement provides a tariff preference margin (Figure 14) shows that Nariño's exports of palm oil, tuna, fabrics, and citrus fruit have increased since the start of application of the Agreement in 2013. This is also in line with the findings of the CGE model (as discussed in the main report), which estimates a positive effect on Colombia's total exports of vegetable oils and fats (which includes palm oil) by 9.8%, other food (which includes preserved fish) by 8.2%, textiles (which includes fabrics) by 5.1%, and vegetables, fruits and nuts (which includes citrus fruit) by 32.3%. Other Colombian sectors estimated to have benefitted from the Agreement through higher exports are mostly manufactured products, which are not produced in the Department. In any case, the observed export performance supports the economic model estimations. One can therefore conclude that the tariff preferences provided by the Agreement have positively impact on the exports of key products for Nariño, with the exception of coffee and gold, which were not affected by the Agreement in either way.

Box 1 discusses the importance of the Agreement for lime production in the Department.

Figure 14: Main export products with preference margins under the Agreement, Nariño, 2007-2019 (USD '000)



Source: Own preparation based on DANE-DIAN, 2020.

Other Colombian sectors estimated to have benefitted from the Agreement through higher exports are mostly manufactured products, which are not produced in the Department. In any case, the observed export performance supports the economic model estimations. One can therefore conclude that the tariff preferences provided by the Agreement have positively impact on the exports of key products for Nariño, with the exception of coffee and gold, which were not affected by the Agreement in either way.

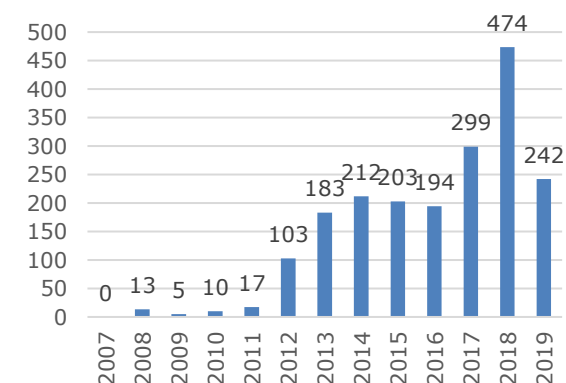
Box 1: The Agreement and Nariño's exports of Tahiti Lime

The production of fresh citrus fruits, including limes, is very important for the Department, since it is one of the largest export crops and contributes significantly to the generation of employment in the region.

Nariño has about 2% of the national citrus production with a cultivation of 4,890 hectares; the Department has about 3,500 producing families, with a yield of 4.6 tons/ha (Ministerio de Agricultura y Desarrollo Rural, 2020). Citrus production takes place in more than ten municipalities of the Department. The main export product is the Tahiti lime, which is grown throughout the southern region of Colombia.

The Agreement allows Colombia to export Tahiti limes duty-free to the EU, compared to an MFN ad valorem tariff of 12.8%. This tariff preference, along with additional support provided to (especially) small-scale producers (see section 3.3 below) explains the rapid growth of lime exports from Nariño since 2012 (see Figure A).

Figure A: Exports of Tahiti lime from Nariño, 2007 to 2019



Source: Source: Own preparation based on DANE-DIAN, 2020.

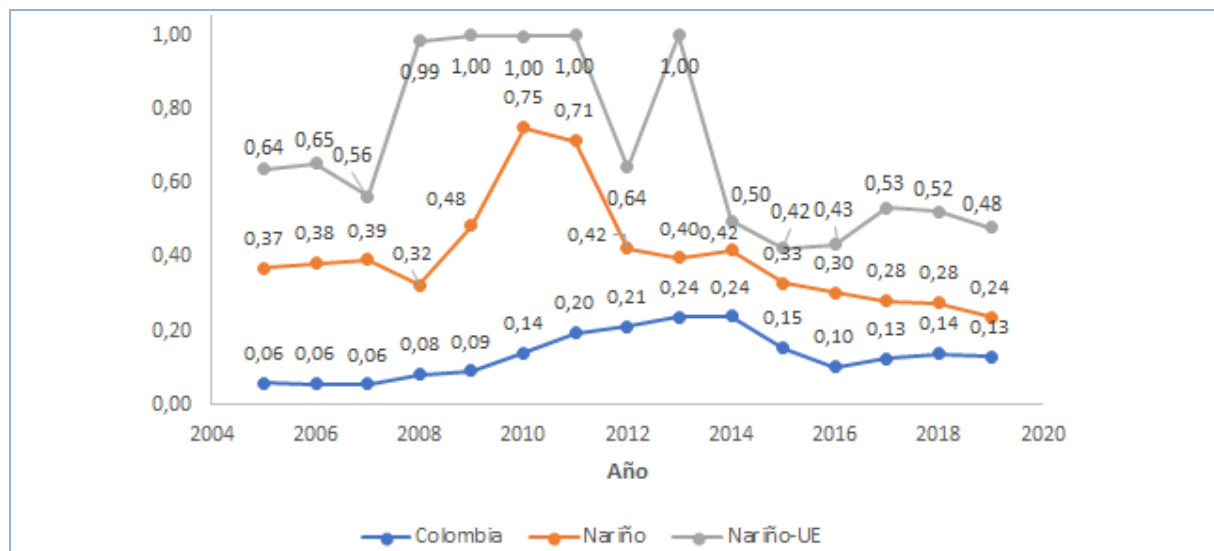
According to the most recent data from the Ministry of Agriculture and Rural Development, the EU is the destination for 37% of Colombian exports of Tahiti lime (Ministerio de Agricultura y Desarrollo Rural, 2020). Considering the importance of lime exports in Nariño, this directly benefits the Department's economy.

3.2 Export diversification

Figure 15 shows the evolution of export product concentration over time, comparing Colombia's performance with that of Nariño's overall exports and Nariño's exports to the

EU.³ As is to be expected, Nariño's exports are less diversified than Colombia's overall exports. This is because the productive base in the Department is narrower than the productive base in Colombia overall, and also because the share of the Department's economy producing for export is relatively limited, as described in section 2.2 above. Nariño's exports to the EU are even less diversified: this is because the EU is just one market among several, and not the easiest one to reach; this implies that only a sub-set of Nariño's total products are exported to the EU. What is more important is the trend over time: here, it is observed that Nariño's overall export concentration increased until 2010/2011, but since then almost constantly decreased. Likewise, the Department's exports to the EU have diversified since the start of application of the Agreement in 2013, although palm oil still accounts for the lion's share (about 85% in 2019 and 2020, in volume terms). Especially exports of Tahiti lime have started in 2019 and have grown fast in 2020 again; other products that started to be exported since the Agreement's application are palm kernel oil and cocoa.

Figure 15: Evolution of export product concentration index, 2005-2019 (by value)

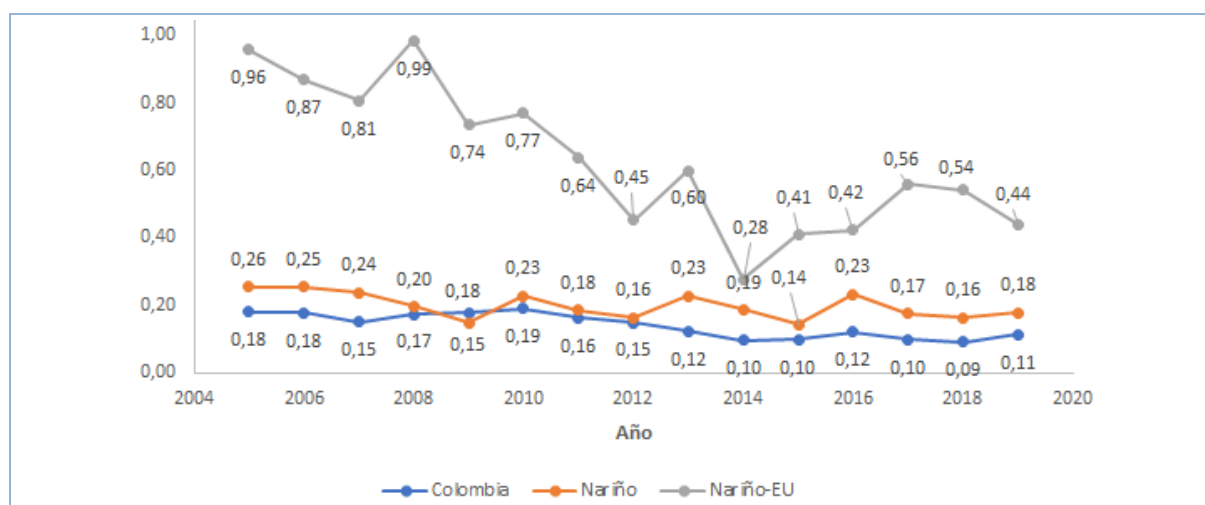


Source: Own preparation based on DANE-DIAN, 2020.

The diversification of Nariño's export in terms of destinations has been relatively high over the years (Figure 16). Regarding diversification within the EU across the Member States, concentration substantially decreased from 2008 to 2014, but then increased again in the following years – although diversification was still higher than in the years up to 2011.

³ The higher the index value, the more concentrated are exports; a value of 1 indicates that only one product is exported.

Figure 16: Evolution of geographical export market concentration index, 2005-2019 (by value)



Source: Own preparation based on DANE - DIAN, 2020.

At the same time, the United States and Ecuador continue to be the leading export destinations for Nariño. For the USA, this is in line with the direction of Colombia's overall exports; and the dominant export is coffee. Ecuador is an important market for the Department because of its proximity, with the Department being located directly at the border to Ecuador; accordingly the export product portfolio is varies, but with a high importance of fresh produce including lemons and oranges, as well as tuna. Among the EU Members, the Department's largest destinations are Spain – where exports increased substantially since 2013 –, followed with some distance by Belgium (which has shown a flat trend), and then the Netherlands, Germany, Finland and France.

3.3 Investments and technical support

Linked to the agricultural export opportunities provided by the Agreement, the arrival of foreign companies interested in agricultural investment in Nariño has been observed. Additionally, it has contributed to an increased interest of companies to generate strategic alliances for the commercialization of goods and services generated by and for the agricultural sector of the Department.

During the years prior to the start of the implementation of the Agreement, the departmental agricultural sector had a panorama of unconsolidated productive systems, but with opportunities and comparative and competitive advantages for the national and foreign markets. These advantages have been exploited with the new opportunities that the Agreement has brought, in such a way that, in recent years, the department of Nariño has seen the growth of investments in, and output of, the agricultural sector. In this sense, activities related to the strengthening of different agricultural value chains, the strengthening of links, the development of technological packages for clean production, and the formation of production networks and clusters have been supported. This also includes sectors that have not benefited from tariff preferences, such as the coffee sector, which is the most important exporting sector of the Department.

In this context, in Tablón de Gómez, a municipality in the Department of Nariño, new productive developments in the coffee sector have been supported, which is contributing to continued and increased coffee exports to the EU. With 21 different productive projects supported by government agencies, this municipality presents an example of the spatial effects and the formation of production networks in the department (Unidad de Restitución de Tierras, 2020). Similarly, in the municipalities of Leiva and El Rosario, small producers of citrus fruits such as the Tahiti lime have begun to export this product, aided by initiatives financed by the European Fund for Peace in Colombia (Fondo Europea para la Paz en

Colombia), and executed by different government agencies or civil society. Often, these production and export processes are strengthened through the establishment of commercial alliances between producer associations and interested exporting companies (Fresh Plaza, 2020). The European Fund also finances a larger, €8.5 million initiative across the whole Department, “Desarrollo Territorial en el Departamento de Nariño en condiciones de Paz” (2018-2023), which aims at generating sustainable economic and productive opportunities for the Department and the Municipios of Pasto, Tumaco and Ipiales. Although it is impossible to determine if this initiative would have occurred also in the absence of the Agreement, it is clear that the export opportunities facilitated by it complement the project’s activities in the Department.

3.4 Social development and human rights

As diagnosed in the 2014 “Policy and strategy for the agricultural development of the department of Nariño” (DNP, 2014), at the time the agricultural sector in Nariño presented competitiveness problems due to high production costs associated with the cost of transport, the overuse of inputs, the cost of labour, and the lack of irrigation and drainage.

As shown above, the Agreement has contributed to growth in exports and production of products such as fruits, as well as an increase in the competitiveness of these goods, including through technical support provided or financed. This has led to new business opportunities for the agricultural sector, promoting the economic inclusion of thousands of peasant families. In this regard, it is important to highlight that these developments have also been supported by the implementation in the Department of measures designed by the Ministry of Commerce, Industry and Tourism regarding opportunities in the fruit and vegetable (as well as coffee) sector (Ministerio de Comercio, Industria y Turismo, 2013).

Increasing the competitiveness and output of the vegetables and fruits sector in the Department has also had positive effects on social development and human rights indicators, as well as the conversion of illicit crops; however, the Department’s challenges in relation to social, labour and human rights are too deep and extensive that they could have been eliminated by the Agreement. Therefore, to improve the living conditions of the population and particularly in the agricultural sector in the Department, domestic policy measures are needed, including the implementation of rural planning instruments to organize communities in their production spaces and food safety. In relation to trade union and association rights, policies must be implemented to minimize risks to integrity and stigmatization to the social and peasant movement, guaranteeing the protection of life and thus avoiding forced displacements.

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CASE STUDY 6 – THE EXPERIENCE OF MSMES WITH THE AGREEMENT

1 INTRODUCTION

The purpose of this case study is to contribute to the analysis of how and to what extent the Agreement has led (or not) SMEs to start exporting to or importing from the respective partner countries, as well as which obstacles new traders still face. The case study complements the quantitative analysis in the main evaluation report by describing the experience of individual MSMEs in the Parties in trading with the respective other Party under the Agreement. These experiences are based on information provided as part of the consultations undertaken for the evaluation

2 INDIVIDUAL MSME EXPERIENCES

2.1 Colombia/EU

MSMEs interviewed as part of the evaluation indicated the following experiences with the Agreement.

COMEPEZ is a fish farm incorporated in December 1996. It provides direct employment to about 250 persons through its main product, chilled tilapia. First exports to the EU took place in December 2017; with Europe (mostly the UK and Spain) now accounting for about one quarter of total exports (and the remainder destined for the US market). To develop the EU market, the company has two permanent staff based in Spain. Exports to the EU could take place only because of the Agreement and the tariff preferences it provides (the MFN tariff is 9%), as one of the main competitors is Greece; with Greek producers also benefiting from lower transport costs. The company is satisfied with the Agreement but was negatively affected by covid-19 and the much reduced availability (and increased costs) of air cargo. In addition, the treatment of VAT refunds in Spain as well as documentary requirements and delays sometimes cause problems, which are critical given the highly perishable nature of the product, but these are not genuinely related to the Agreement.

For **Maquiempanadas**, a family-owned business with about 20 employees producing machines for the production of empanadas and other equipment for restaurants, was established in 2010 and started selling their self-developed product in 2014. The company has stated that it has benefited from the Agreement in three ways: duty-free access to the EU market, duty-free imports from the EU of components needed for production, and support (from the Colombian Government) to participate at ANUGA fair in Cologne 2017. Thus, the Agreement has been essential in developing business relations with the EU, and export revenues have increased; at the same time, the EU market for the company is likely to remain limited, as it primarily consists of restaurants offering Latin American food, and also because of the high transport costs (with sales limited, the company uses DHL to ship its products to individual customers). The US market continues to be larger.

Primoris Colombia is a subsidiary of **Primoris Belgium**, a specialised laboratory founded in 2001 for residue and contaminant analysis in food and related products. Primoris' clients are mainly companies from the food and agricultural sector, of high importance for the Colombian economy. The company has about 20 staff. The main service provided by Primoris Colombia is the analysis of pollutants and mycotoxins in fruits and vegetables for the domestic and international market; Primoris Colombia also offers its services in Ecuador. The company states that the main benefit of the Agreement has been the

elimination of duties by Colombia for needed inputs. The investment of the Belgian mother company in Colombia was however not related to the Agreement but rather on the importance of agricultural production in the Colombian economy and the associated need for analysis.

Puratos Colombia is a subsidiary of the **Puratos Group Belgium**, with about 50 staff (the group has subsidiaries in 71 countries, 64 production units in 46 countries and 9000 employees worldwide). It provides inputs and expertise to food industry, in particular the bakery, patisserie and chocolate sectors. The Colombian subsidiary was established in 1981. The Agreement has had a positive but rather limited impact on the company because of the Colombian tariff preferences for inputs sourced from the EU; the company only produces for the Colombian market. No problems have been encountered in the implementation of imports under the Agreement, facilitated by the fact that the exporters from which the company buys are approved exporters.

Some additional examples of Colombian SMEs which have benefited from the Agreement are:¹

- **Organic Bas de Colombia**, a company active in the chemicals and life sciences. The company produces and sells, among other products, organic nitrogen, which under the Agreement benefits from duty-free access to the EU market, instead of the 3% MFN tariff that would otherwise be payable. As such, it could export organic nitrogen worth USD 1.5 million to Austria in 2020. The company has also received support in dealing with the exporting requirements, and is investing in further enhancements of its international business model and operations to expand exports.
- **Frutales Las Lajas** is a fruit producer based in the Cauca valley. Although its product portfolio is diverse, it concentrates on the export of two products, avocado and lime. Its exports to a number of EU Member States (Germany, Holland, Spain, Portugal) have been facilitated by the tariff preferences granted under the Agreement. Exports have taken place for several consecutive years now. The same is true for **FLP Colombia**, an SME with two business units, production and export of fruit pulps, fruit concentrates, dehydrated fruit and pouches; and fresh avocados. The company has been exporting avocados to the EU for several years, but not processed food products.
- Conversely, the company **Clesus**, a producer of medium-voltage electric drives formally established in 2015 in Pereira, benefits from the Agreement through the tariff preferences in Colombia. The company uses components imported from Germany, which are duty-free under the Agreement, enabling the company to save costs and be more competitive. As such, the products are now not only sold in Colombia, where the original client base was coffee farms and processors, but are also exported to Mexico, Vietnam, and Indonesia.

2.2 Ecuador/EU

Alku produces toys for pets made of recycled plastic bottles. The company has started exporting to the EU (Netherlands, Sweden, France, as well as the UK, then still an EU member) in 2018, mostly to individual pet shops. According to the company, key benefits of the Agreement are the duty-free market access to the EU (MFN duties would be 4.7%), as well as the training and support provided through Fedexpor with financial support by the EU. In addition, the EU market was identified as a priority destination because of the Agreement (the company also exports to Chile and other Latin American countries, and has made some small exports to the US). Unlike toys for children, there are few regulatory barriers in the EU. However, the company is also developing a new product line, biscuits for pets, whose exports to the EU would require prior testing and certification, the costs of

¹ Information provided by ProColombia.

which are expected to be prohibitive in the medium term future, and therefore such exports are envisaged only in the longer term.

In terms of challenges, while the company has considered to sell directly to consumers in the EU through an online store, this has proven impossible due to payment issues, as payments from the EU to Ecuador e.g. using PayPal were not possible, nor could the company establish a bank account in the EU without a commercial presence. Another impediment to e-commerce from the EU are high transport costs, especially for the low-value products offered by the company. The availability of a shared warehousing capacity in the EU for MSMEs from the Andean countries that could serve as a hub for e-commerce sales to EU consumers would greatly facilitate small-scale exports to the EU. Another challenge for exports was the covid-19 pandemic, which significantly increased logistics problems and costs, and also caused a number of export agreements previously agreed to be cancelled by buyers due to the uncertainties

Amati Foods/Gramolino is a family business directly employing 10 persons producing amaranth (sold only domestically) and value added products based on amaranth (pops, risottos and drinks); the amaranth is sourced from 25 families in Cotacachi (19 of which are headed by women) and five in Chimborazo. The drinks are currently exported to Chile, and the company also started to export them to the EU in January 2021 supplying a supermarket chain, after having participated in two fairs in Europe, at Food Matters Live London 2019 and BioFach Nuremberg 2020. The Agreement's tariff preferences for the company's export product are sizeable, the preference margin is 9.6%. The company notes that the Agreement "has benefited us in many ways; most importantly it has allowed us to enter the EU market very fast, thanks to all the support programmes that exist." Specifically, support by CORPEI and FEDEXPOR (with funding from the EU) about the EU market and market access requirements (including SPS and labelling rules), as well as financial support to participate in the European fairs was mentioned. Unlike many other MSMEs interviewed, Amati Foods faces no problems of scalability, as it works with a separate packaging firm in Ecuador (with 200 employees), and can thus supply full container batches. Given the packaging of drinks in individual portion tetrapacks, no cooling is required, which also facilitates the export.

LeafPacks and **Belinda Flowers** are the trademarks of LeafPacks, a small company with 6 staff. LeafPacks are 100% biodegradable and compostable plates made of natural fibres, which are collected from rural communities and processed under fair-trade criteria. Belinda Flowers are artificial flowers and similar home decorations hand-made with natural fibres and ingredients. The company has benefited from trainings and support (such as participation in fairs) for exporting, but has not yet managed to export to the EU. The reasons for this are various: first, production costs are relatively high, given the high share of manual work required for the collection of the raw materials and the production (especially of the artificial flowers). This makes it difficult to compete on costs with high-volume producers in e.g. China and India, even when considering the duty free access to the EU market. In addition, although the company complies with fair trade criteria and requirements, the costs of fair trade certification is prohibitive in relation to the small-scale production, which in turn prevents the company from charging a premium price. For LeafPacks, another problem is the minimum size of shipments; some prospective clients in the EU requested shipment of at least three containers per month (about 300,000 plates), whereas the company, which is the only producer in Ecuador, currently could supply only about 15,000 per month.

Similar problems were reported by **Nuna Foods**, a small producer of snacks (primarily plantain and yuca chips) with ten employees. The company benefitted from technical assistance through FEDEXPOR (with funding from the EU) to achieve HACCP certification; the products are export-ready, and contacts with prospective buyers have been established – but given the small production volumes the company is not cost-competitive on the EU market, even with the tariff preferences available under the Agreement; in this sense, the

tariff preferences alone do not provide a specific benefit to MSMEs, as large companies (from the same country) benefit from them as well. At the same time, although organic production and fair-trade requirements are fulfilled, certification is too expensive, and as a result no premium prices can be charged.

2.3 Peru/EU

Armadores y Congeladores del Pacífico (ARCOPA), is a seafood exporter founded in 1993. Originally specialised in hake fishery, the company has diversified into processing of other species like giant squid, squid, scallops, Mahi Mahi, and anchovies. ARCOPA exports frozen fish to the EU (mainly Spain, Estonia and Lithuania). The company also produces fish meal but does not export it to the EU as ethoxyquin is used as an antioxidant, the authorisation of which was suspended by the European Commission in 2017.

SPS-related problems in the EU have been faced in several times. In Germany, the border agencies requested a physical copy of the sanitary certificate, although this had already been accepted by the EU previously. The matter could only be solved through support from the Peruvian authorities, which caused a delay of five days until the consignment could enter the German territory. Similarly, a shipment to Antwerp was rejected and returned to the port of Paita, causing the loss of USD 18,000. The availability of inspectors also sometimes is an issue. Overall, the Agreement should allow for greater flexibility.

APROCAM is a cooperative of small cocoa and coffee producers in the Amazonian Bagua region. It was founded in 2013, with members cultivating about 495 ha of cocoa and 235 ha of coffee; about 60% of the members belong to the Awajun ethnic group in the Imaza district. The cooperative hold organic and fair trade certificates. APROCAM has regularly exported cocoa to Italy since 2013 without any problems. In its exports to the EU, the following problems were encountered:

- Exports to Austria faced issues due to cadmium level allegedly above the established limits; this is a problem as even with the organic production cocoa cannot meet the requirements applied. The difference in treatment between different EU Member States should not occur;
- Importers undertake their own pesticide residue analysis (in laboratories in the EU), and if they encounter (or claim to encounter) residues, only the price for conventional coffee is paid;
- Digital certificates of origin should become the norm;
- The cooperative would welcome native Amazonian cocoa from Peru to benefit from origin protection, and have requested that the process for this GI registration be initiated. However, the process seems to be too complicated, lengthy and costly.

Manutata is a producer and exporter of Brazil Nuts established in 2010 and initiating production in 2014; it is a subsidiary of the Bolivian company Unagro, which has been in the business for more than 30 years. Manutata's processing plant employs about 300 staff, and an additional 3,000 are involved in the collection of the nuts in the Amazonian forest. HACCP certification was obtained in 2017, organic (USDA and EU) and kosher certification in 2018. The company competes with larger producers in Bolivia (including the parent company) and Brazil, which benefit from economies of scale. The company has not so far entered the EU market, as even with the Agreement it does not have any preferential treatment over Bolivian competitors (under the GSP+), and therefore the Agreement does not eliminate the cost advantage of these larger competitors. (The EU market continues to be served by the Bolivian parent company.) Conversely, it has established, in 2018, a subsidiary in Korea for the commercialisation of its products.

Peruvian Nature is a producer of various types of dried “superfood” (most importantly maca, but with about 20 others, including noni, sachu inchi, acai, etc.) established in 2001, with about 70 staff. The company holds HACCP and GMP certifications, as well as various organic, kosher, and fair trade certifications. The company exports to about 30 countries world-wide, with annual exports to the EU28 amounting to about USD 2 million (of which about half to the UK). To simplify export paperwork, the company is in the process of becoming an approved exporter; the criteria and process are straightforward. Although exports to the EU under the Agreement pose no major problems, it has been observed that the implementation of rules by border agencies vary, especially with regard to sanitary issues (i.e. the form and time certificates need to be presented, whether or not physical inspections and tests are done, etc). Also, the direct shipment requirement sometimes causes problems: when shipments change ships, and the merchandise arrives on a different ship than indicated in the documents, this typically leads to delays (or loss of preference). Overall, the experience with the Agreement has been positive; the company would however prefer if the EU could exert more pressure on Peru with regard to improving governance.

Shanantina is a producer of sachu inchi and various value added products on the basis of this nut (snacks, oil, flour). The company was established in 2007 and holds various certificates for organic production (USDA, EU, Japan). It has exported to the EU for a number of years. One of the main benefits of the Agreement are the tariff preferences. In recent year, competition from Thailand has grown fast, selling a lower prices (although the quality is lower as well), but the preferential access to the EU helps Shanantina stay competitive on the EU market. Nevertheless, because sachu inchi is a new product on the EU market, problems have been faced. In particular, only sachu inchi oil has been approved in 2013 under the Novel Food regulation, and hence only oil can be exported. Approval for roasted sachu inchi nuts was requested in 2019 by the company in collaboration with other Peruvian producers and PROMPERU, and supported by CBI, but rejected by the EFSA in 2020.² Despite this setback, creation of a subsidiary (with co-investment from a client) in France is under way.

Industrias Electro Químicas (IEQSA) produces metallurgical zinc derivatives such as zinc alloys, rolled zinc (plates, sheets and coils), calots for the manufacture of zinc-carbon batteries, zinc strips for electrochemical applications, anodes for electroplating, etc., and chemical products such as zinc oxide. The tariff preferences under the Agreement allow the company to be competitive on the EU market with EU producers, as the preferences make up for the higher transport costs. At the same time, the regulations in the EU continue to be tightened, adding new costs for packaging labelling, appointing an exclusive representative in the EU, etc. – but these issues are not related to the Agreement.

Corporación Cayaracc (formerly Consorcio Perú Inversiones, brand Billy Gyn) is a family-owned business exporting of footwear to France. Until 2019 the company has exported four to five times per year, but since 2020 only two shipments could be sent due to the pandemic. With the formalities being arranged by the importer, the company is not aware of the benefits which the Agreement provides.

Puig is a Spanish company with a subsidiary in Peru importing cosmetics from Spain (and other countries). The key benefit of the Agreement for the company is the elimination of Peruvian import duties on cosmetics, which provides a preference of 6%. Generally, the importation works well, especially from Spain, but from other sources the direct shipment requirement sometimes causes problems.

SKBergé is an importer of cars (representing Kia, Fiat and other). The Peruvian branch was established in 2000 and is a subsidiary of the Chilean parent company. For the

² See <https://www.nutraveris.com/en/2020/06/04/traditional-food-negative-opinion-from-efsa-on-roasted-seeds-from-sachu-inchi/>.

company, the Agreement's main benefit is the reduction of tariffs on cars and car parts. Imports had already taken place prior to the Agreement, and apart from the tariff cuts, there have been no changes.

3 VIEWS ON AGREEMENT EFFECTS ON MSMEs

ProColombia considers that the Agreement has been very positive, particularly in terms of rules of origin, because it is more flexible than other FTAs which Colombia has in place, for example the Colombia-USA FTA, which immediately benefits the export, in general, of the chain of textiles and garments value chain, benefitting exports of, e.g. swimwear and sportswear.

Other stakeholders interviewed, mostly representing business interests, confirmed this information. The elimination under the Agreement of Colombian duties for machinery imported from the EU was mentioned as an essential benefit e.g. by representatives of **fruit** exporters that stated that cheaper machinery and parts needed for the packing houses enabled them to compete internationally. They also stated that this benefit is on top of the tariff preferences granted by the EU for Colombian fruit exporters; the sector, which has many SMEs, therefore benefits twice.

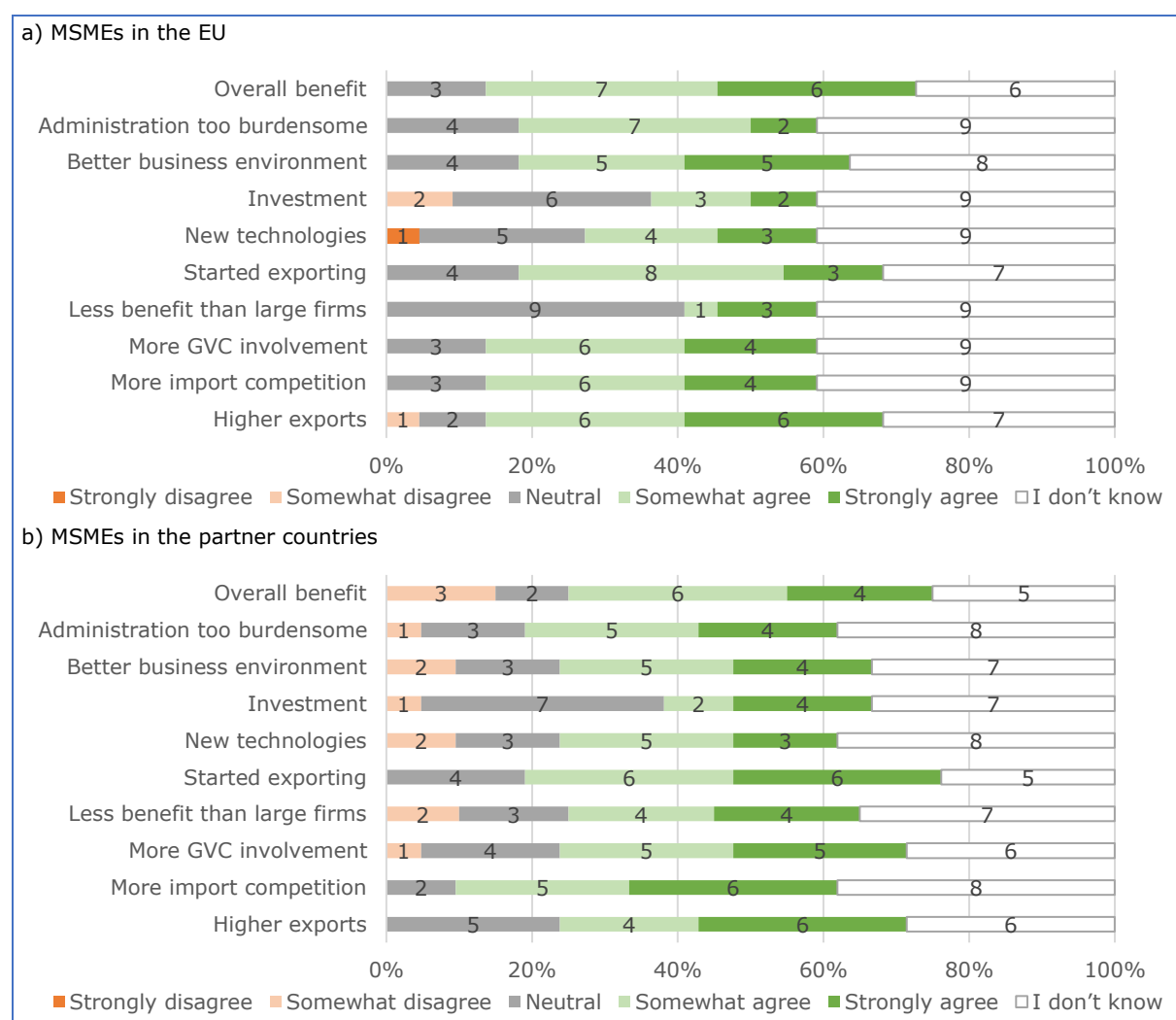
For **palm oil**, the situation is slightly more complicated. Although the sector as a whole benefits from the tariff preferences granted by the EU under the Agreement, the impact on MSMEs is more mixed. Although the sector is dominated by small and medium producers, which account for 83% of the sector, exports are carried out through a limited number of international trading companies, which benefit most from the Agreement. However, there are also some small groups of palm growers, for example, from María la Baja or Tibú, which also export to the EU market through their own trading companies, and which are integrated with alliances of small producers.

A number of MSME representatives also pointed out that technical assistance provided by the EU and EU Member States following the start of the Agreement helped them to start exporting. Support to sectors such as bio-cosmetics with native species, as well as export support (participation in fairs, business-to-business meetings etc.) provided by the EU but also Dutch or German bilateral support were highlighted as essential elements in helping MSMEs to start exporting to the very demanding EU market.

In the business survey, while relatively few companies participated (23, of which six were from the EU and the rest from the partner countries) respondents were asked about a number of different effects that the Agreement has had on MSMEs (Figure 1). The responses show a clear positive perception, both regarding the Agreement's impact on MSMEs in the EU and those based in the Andean partner countries.

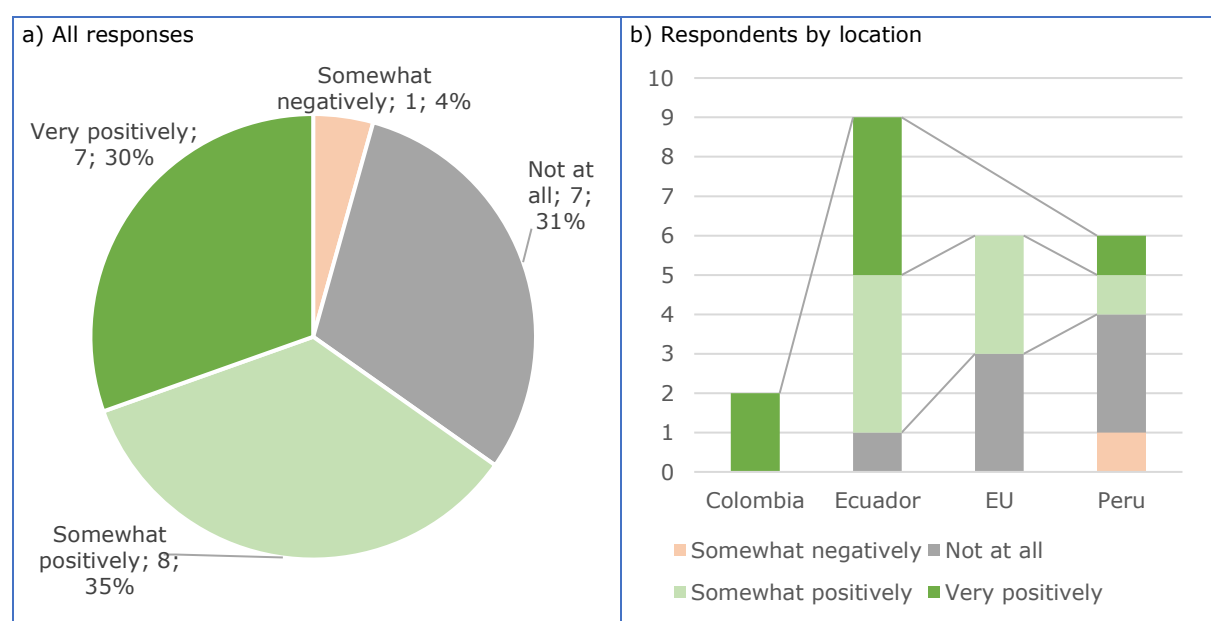
Likewise, respondents to the survey were also mostly positive on the Agreement's impact on their own company (Figure 2): of the 23 respondents, only one (4%) stated that there had been a somewhat negative effect, compared to 15 (65%) finding a somewhat positive or strongly positive effect (and seven no effect). Respondents from the EU and Peru were comparatively less positive, with a higher share of respondents considering that the Agreement had no effect for their company.

Figure 1: Agreement impact on MSMEs as seen by businesses



Source: Business survey.

Figure 2: Agreement impact on own company



Source: Business survey.

4 SUMMARY

Based on the information provided by MSMEs in the consultations, the two main benefits of the Agreement have been:

- Tariff preferences provided by the Agreement both for the companies' products and for the inputs they use in production; and
- Technical assistance and financial support provided in the context of the Agreement by national support institutions and EU projects: information about markets and market entry requirements, support to participate in fairs, and assistance in enhancing operations (such as achieving HACCP or other certifications).

A number of consulted MSMEs mentioned that the first benefit is necessary but not sufficient for MSMEs to really benefit from the Agreement, because larger companies with efficiencies of scale and therefore lower costs benefit from the same preferences. Therefore, the second benefit – support and assistance – is a necessary complement to the tariff preferences for MSMEs to really make use of the Agreement.

Challenges mentioned by MSMEs are:

- Knowledge about the approved exporter status is limited. Few of the consulted MSMEs were aware of its existence, and hardly any are approved exporters;
- Strict requirements in relation to sanitary certificates as well as apparent differences in the implementation of rules across EU Member States sometimes cause delays and extra costs. MSMEs in such situations feel left alone and would welcome more support by the authorities – or some kind of problem-solving mechanism under the Agreement; and
- The direct transport requirement under the rules of origin also poses problems for MSMEs, especially as they are frequently confronted with their merchandise being transshipped or deconsolidated en route. While generally preferences can be maintained in discussion with the customs authorities, this causes extra work and higher costs.

A general constraint that was mentioned by several MSMEs was the lack about the partner's market and exporting requirements, as well as the competitive disadvantage of MSMEs in comparison to larger companies, which risks that the latter benefit more than small businesses.

Overall, however, the consulted MSMEs evaluate the Agreement positively, as the benefits clearly outweigh the "nuisances".

CASE STUDY 7 – INCIDENCE OF CHILD LABOUR AND RESPECT FOR CHILDREN’S RIGHTS IN SECTORS IN COLOMBIA, PERU AND ECUADOR INVOLVED IN EXPORTS TO THE EU

1 INTRODUCTION

1.1 Children’s rights – references in international human rights law

Children are entitled to the same human rights and fundamental freedoms as adults. Like other vulnerable population groups, children have been given a special status of protection in the UN framework and in regional human rights treaties. The Convention on the Rights of the Child (CRC), a legally binding international treaty, is the key instrument on the rights of the child, which focuses on protection of children against discrimination, exploitation, and neglect, sets out their basic needs and rights, and defines obligations of states to ensure their well-being. Its Optional Protocols cover protection of children against sexual exploitation, protection of children in the situation of armed conflict, and allow children and/or their legal representative to submit complaints in case violations of their rights cannot be addressed effectively at the national level. EU MS and the Andean countries have ratified the CRC and the Optional Protocol on the Involvement of Children in Armed Conflict and hence have accepted legally binding obligations on protection of children’s rights specified in these treaties.¹

Children’s rights are also addressed in other core human rights treaties, e.g., both Covenants, the Convention on the Rights of Persons with Disabilities, the Convention on the Elimination of All Forms of Discrimination Against Women and others. Regional treaties also include explicit provisions regarding protection of children’s rights, e.g., the American Convention on Human Rights and the EU Charter of Fundamental Rights (see ratification status of human rights treaties in Annex E of the main report).

1.2 Children’s rights and trade

Since the entry into force of the Lisbon Treaty, the EU has taken actions to advance the international framework for child protection, including through trade agreements (Lind-Haldorsson, O’Donnell, 2016, European Commission, 2017f). In a trade context, expanding levels of trade liberalisation and increasing business activities affect children, e.g., through impact on their health through increased pollution, or their standard of living through increased job opportunities that open up for adult household members. A more direct, immediate impact of trade on children’s rights is usually discussed through the problem of child labour (Jodoin, Pollack, 2019).

1.3 References in the EU Trade Agreement with the Andean countries

Article 269(3)(c) of the Agreement includes commitments of the Parties regarding effective implementation of the already ratified ILO fundamental conventions No. 138 (on minimum age) and 182 (on worst forms of child labour), which includes the abolition of child labour.

Moreover, actions taken to reduce and eliminate child labour have been discussed regularly at the annual meetings of the TSD Sub-committee (for details, see Annex C to the main report). In this context, the EU has also provided assistance and most recently (at the TSD

¹ The reservation of Colombia to the CRC is in fact an extensive statement by which the state commits to an obligation beyond the one expressed in the treaty (minimum age for recruitment into armed forces set for 18 years of age instead of 15 years as stipulated in the treaty).

meeting in 2020) agreed with the Andean partner countries to hold an online workshop on child labour.

2 IMPLEMENTATION OF THE AGREEMENT AND CHILD LABOUR IN THE PARTNER COUNTRIES

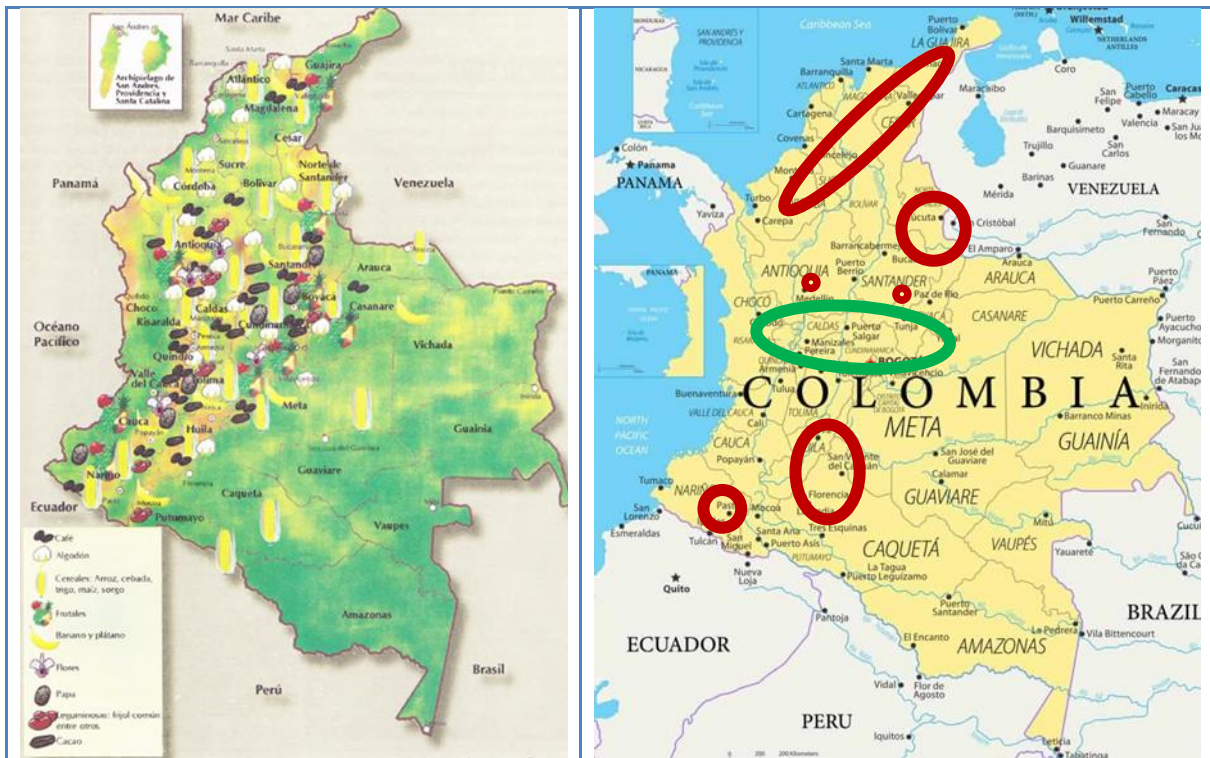
2.1 *Child labour in Colombia*

The Constitution recognises rights of children in Articles 44 and 45. In 2017, Colombia made a significant effort in eliminating child labour by approving the National Policy to Prevent and Eliminate Child Labour and Protect the Young Worker and a roadmap to prevent and eliminate child labour in mining (US Department of Labour, 2017). In 2021, the Colombian Ministries of Labour and Education, the Colombian Network against Child Labour and the Institute of Family Welfare, as well as representatives of local authorities signed a National Pact for Prevention and Eradication of Child Labour and Protection of Young Workers, in which they emphasised the role of education in the fight against child labour and the need to support return to school after the break caused by the current pandemic. They recognised importance of labour inspection and of identification of local needs and risk factors which may increase probability of child labour (Gobierno de Colombia, 2021). Activities related to prevention and elimination of child labour have also been included in the National Development Plans 2014-2018 and 2018-2022 (see Annex C-1 of the main report). Colombian law (Resolution 1796 of 2018) provides an updated list of hazardous types of work prohibited for persons under 18 years of age. The activities listed there include, e.g., work in mining, work involving contact with chemicals, activities involving direct contact with animals generating a high level of risk for health and safety, activities involving contact with residues of animal origin and with dust of certain plants (cereals, cotton), work with tools and machinery, driving means of transport, work with radioactive or toxic substances, and work in conditions involving extreme temperatures, insufficient ventilation, or light or long-term noise. The same Resolution envisages that persons of 15-17 years of age may work with an official authorisation, which may be revoked if minimum guarantees protecting health, social security, education, and acceptable conditions of work are not met.

As outlined in Annex C-1 of the main report, the Colombian authorities have taken several actions to reduce the incidence of child labour, and the number of working children in the age group of 5-17 years has decreased from 13% in 2011 to 4.9% in 2020, in absolute terms from 787,000 in 2007 to 523,000 in 2020 (DANE, 2021, DANE, 2001-2018). Agriculture remains the main sector of activity, with a 44.1% share in total child labour in 2020 (DANE, 2021). Overall, during the analysed period, low rates of child labour have been identified in departments with a more diversified and better developed economy and lower levels of informal adult employment. On the other hand, while there were exceptions, regions with high rates of child labour corresponded with those having high levels of informal adult employment and a less diversified economy. For example, the highest levels of informality were registered in Cucuta (74.4% in 2007 and 73.1% in 2019) and at the same time, the area was marked as having the third highest level of child labour in 2015 (12.5%) (DANE, 2007b; 2019a) and the highest in 2020 (3.6% in the city, without rural areas) (DANE, 2021).

As discussed in the economic analysis and in sections 6.1 to 6.3 of the main report, the Colombian sectors benefitting from trade with the EU (with increases in exports and output supporting job creation) include parts of agriculture (e.g., vegetables, fruits, and nuts), food processing (other food products), textiles, apparel, metals, chemical products, rubber and plastics, and transport equipment. Negative effects have been estimated for machinery, motor vehicles and pharmaceuticals.

Figure 1: Agricultural activity and regions with child labour incidence in Colombia



Key: Red shape – higher level of child labour Green shape – lower level of child labour

Source: Atlas geográfico: <https://atlasgeografico.net/produccion-agrcola-en-colombia.html> (left panel); Proyecto Mapamundi: <https://proyectomapamundi.com/america-del-sur/colombia/> (right panel)

Regarding sectors benefitting from exports to the EU, agriculture records an overall high rate of child labour incidence (44.1% share in all child labour in 2020, ranking first among sectors recording child labour) (DANE, 2021). According to Torres-Tovar et al. (2018), due to automation of processes and formal employment for adults, there is no evidence of regular child labour in rice, cotton, and sugar cane cultivation in Colombia. This is due to the commitment of formal enterprises and trade union monitoring (Torres Tovar and Helo Molina, July 2020). According to the literature, e.g., in the sugar cane sector, collective workers' actions, including strikes, helped to bring about a change towards direct and formal employment and a recognition of trade unions' role in labour relations (AIL, April 2021). Moreover, the US-Colombia Labour Action Plan of 2011 might have also played a role. It chose sugar cane as one of the priority sectors for labour inspection and envisaged faster than originally planned implementation of laws and regulations on formalisation of work and work intermediation (the laws were adopted in 2010) (Colombian Action Plan, 2011). On the other hand, in informal employment in subsistence farming and small-scale family undertakings, e.g. in production of panela sugar cane, involves children and adolescents. Reportedly, inspection services have only very limited resources at their disposal in rural areas² and therefore, child labour may remain unaddressed. Moreover, the lack of training and respect for health and safety at work principles (incl. that children and adolescents operate field machines) results in a high rate of accidents at work, and the lack of medical infrastructure may reduce the possibility of providing medical assistance in case of an accident. Rice and cotton are cultivated in El Espinal (department of Tolima). While work in these two sectors is automated and in general workers are adult and have formal contracts, there are cases of poor, homeless families moving within the region and undertaking occasional informal work at the harvest, including children and adolescents (the latter usually remain outside the education system). Sugar cane is cultivated in the

² To improve labour enforcement in rural areas in Colombia and strengthen the capacity of labour inspection, the EU provided funding for an assistance project implemented by the ILO.

department of Valle de Cauca and panela sugar cane is produced in Cundinamarca (Torres-Tovar et al, 2018). A project has been implemented in Valle de Cauca to prevent and eradicate child labour in production of panela sugar cane (FAO, ILO, 2019).

The coffee sector is present in 22 out of the 32 Colombian departments and in 96% is based on small-scale family plantations of up to 5 ha, involving some 540,000 families. Around 75% of the labour force supporting coffee cultivation is provided by family members. The child labour incidence in the coffee sector decreased over the last decade, from 3% in 2011 to 2% in 2020 for children of 5-17 years of age, from 9.1% to 6.8% for adolescents of 15-17 years of age and from 0.7% to 0.5% for children of 5-14 years of age, i.e., below the minimum age of admission to work. This happened as part of the overall decrease in child labour in Colombia nationally, from 13% in 2011 to 4.9% in 2020 for children of 5-17 years of age, respectively from 19.1% in 2011 to 10.1% in 2020 in rural areas. At the same time, the proportion of children from coffee cultivating families not attending school has decreased from 18.7% in 2011 to 14.3% in 2020 for children of 5-17 years of age, from 36.5% to 28.4% for adolescents of 15-17 years of age and from 12.8% in 2011 to 9.6% in 2020 for children of 5-14 years of age.³ In this context, it is important to bear in mind that adolescents of 15-17 years of age are allowed to undertake work which does not have any negative effects for their physical and mental or emotional health and development and in cases where a permission is issued by the relevant authorities. Moreover, while hazardous work is prohibited for all persons under 18 years of age and children should not be involved in work negatively affecting the school attendance, their health and development and the right to rest, the ILO does not prohibit activities, which are appropriate for their age and may involve gradual learning of the family profession. In this context, the National Federation of Coffee Producers has contributed to the implementation of an assistance project (Colombia Avanza) funded by the US and aimed at the elimination of child labour in coffee production in Colombia. In its framework, focused on the departments of Tolima and Huila, information material has been developed, and training and awareness raising activities have been organised to ensure an understanding of the need to eliminate child labour and the involvement of minors in any form of hazardous work, as well as inform about types of work permitted for minors, in particular those of 15-17 years of age, and which would not affect them negatively. Moreover, as part of the EU project on CSR practices in Latin America and the Caribbean implemented jointly with the ILO, OECD and the Office of the UN High Commissioner for Human Rights, under the ILO component information materials have been prepared, e.g., a booklet about child labour for enterprises in Colombia and an information campaign for families and communities in the department of Antioquia (Colombia) was launched in June 2021 to prevent and eradicate child labour in the coffee sector (ILO, June 2021). Also, an ILO Vision Zero Fund project financed by the EU has been implemented in Colombia, to improve health and safety at work in the coffee supply chain based on exchanges of best practice with other coffee growing countries from the region, such as Mexico and Honduras (ILO, 2019g).

Considering the low and continuously decreasing rates of child labour in the coffee sector in Colombia, the likelihood of products involving child labour being exported to the EU is very low. The following elements should also be taken into consideration: First, the Agreement, by creating opportunities for increased exports and income generation for coffee producers, adult household members and hired workers, may have contributed to poverty reduction, better satisfaction of basic needs and, in some cases, potentially reduction of the need for child labour, if incomes of adult household members turned out to be sufficient. Complementary to these are efforts of the National Federation of Coffee Producers promoting sustainable production methods encompassing clean production, the use of good agricultural practices, circular economy principles and a responsible use of natural resources, including land and water. These efforts are aimed at ensuring the

³ Data based on DANE and SISBEN, provided by the National Federation of Coffee Producers

profitability of coffee production including in the medium and long term, the sustainable development of coffee cultivating areas, and support to income generation and the livelihoods of coffee producing families. In addition, as mentioned above, the work of the National Federation of Coffee Producers, the Colombian Government, the ILO and civil society organisations (implementing projects supported financially by the EU and the US), and their awareness-raising campaigns, as well as policy dialogue under the TSD Title have helped to stimulate a change towards an increased school attendance by children, increased awareness of adult family members regarding effects of child labour and less time dedicated to work. On the other hand, the tradition of involving the whole family in work on a farm, and economic factors such as reportedly low prices of some commodities (see also the observations on Peru below) preventing small-scale farmers from hiring adult workers, may prolong the use of family labour, including children and adolescents in sectors exporting to the EU even though the Agreement as such does not have a direct impact on the level of incomes (i.e., it does not set prices for traded goods and does not prevent customers from paying decent prices to suppliers). In this context, it will be important, as noted above, to ensure that children and adolescents are involved in family life and practice in a way that does not negatively affect their health and development, school attendance and the right to rest and therefore does not fall into the category of child labour as defined by the ILO.

In the banana sector, a survey carried out in 2017 by a researcher among 210 workers from eight banana plantations in the region of Urabá (department of Antioquía) revealed that only 1 person among them was in the group of 10-20 years of age (which may also suggest an adult person of over 18 years of age), with the largest group (42%) being in the group 30-40 years of age. Moreover, 88.7% of surveyed workers were members of trade unions. Although most of them were generally satisfied with work, 90.2% said they did not want to see their children ever working in the banana sector (Penagos Gaviria, 2017). The replies suggest formal work and a good oversight of trade unions on working conditions and respect for labour standards in the sector, as well as a lack of signs of child labour. Moreover, in a survey carried out by the ILO in 2020 with a group of 194 rural workers, including 95 from banana plantations from regions the of Magdalena and Urabá, only 1.5% declared to be 18-22 years of age (others were older), 90% said to have a contract for an indefinite period and being member of a trade union affiliated to one of the trade union confederations (CUT or CTC), which suggests formal employment and presence of only adult persons (ILO, 2020a).

The flower sector provides around 130,000⁴ formal jobs and operates in Cundinamarca, Antioquia y Risaralda. In the 1990s and early 2000s, it was linked to child labour (Morales Rubiano et al, 2020). Since then, the sector is committed to prevention and eradication of child labour through Corporate Social Responsibility (CSR) programmes. They focus on three aspects: 1) engagement with families having cases of child labour to raise awareness of the problem and offering jobs to adult members of a household to encourage replacing income generated by children with adults' wages; 2) working with school children to convince them to continue education and not to abandon it to start working, e.g. by funding scholarships; 3) creating opportunities for children in rural areas to spend actively their leisure time, e.g., by launching sport schools or art activities. Moreover, since 2015 Asocolflores, the association representing flower growers and exporters in Colombia, and 21 companies from the sector have been members of the Colombian network against child labour, a public-private initiative engaging state institutions and private enterprises (Portafolio, 2015). Members of Asocolflores require also from their suppliers not to involve child labour, although this is not always monitored. In a study realised in regions cultivating flowers, sector representatives admitted that actions to eradicate child labour from their operations were driven by requirements of certification schemes and expectations of their international customers. According to the study, the problem of child labour requires

⁴ Other sources speak about 90,000 workers in the sector.

involvement and effective cooperation of the sector representatives, local and national government, and school. Moreover, national efforts can be supported by assistance projects (some are financed by the US) (Morales Rubiano et al, 2020). In a workshop organised by the ILO, the sector representatives, based on own experience and an example from Ecuador, recognised that to remove child labour from the sector, there was a need for social dialogue with workers and trade unions, formalization of the sector and compliance with national and international commitments, engagement with children affected by child labour and their communities to remove children from work and create conditions reducing the need for them to work, and joining certification schemes for flower producers which require using only adult workforce (in addition to other possible conditions) (ILO, 2017c). Flower exports to the EU account for some 10% of the Colombian total exports in this sector (ITC, Trade Map, data for 2019) and it may be the case that expectations of European customers also played a role in exercising pressure on Colombian producers (as mentioned above) to respect labour standards, incl. elimination of child labour from their operations and supply chains, and therefore that the Agreement opening additional export opportunities also contributed to it.

Another sector with child labour incidence is small-scale artisanal mining (Alliance for Responsible Mining) classified as hazardous type of work, prohibited for persons under 18 years of age. Child labour is related there to lack of formal employment opportunities for adults, deteriorating living conditions (e.g., due to an accident at work of an adult family member), presence (until recently) of the armed conflict, and the lack of quality education opportunities. Precise data regarding the number of children working in the sector are not available. (Records from the official register SIRITI speak about 5,000 persons, however, the Ministry of Labour admits this number is an underestimation). At the beginning of the 2000s, activities of the small-scale mining sector covered seven departments (Boyacá, Nariño, Cundinamarca, Antioquia, Chocó, Sucre y Santander) (Ministerio del Trabajo, 2017a). According to the UN Committee on Economic Social and Cultural Rights, the National Strategy for the Prevention and Eradication of the Worst Forms of Child Labour is not effective in addressing the exploitation of children and adolescents in illegal mining activities (UN Committee on Economic Social and Cultural Rights, 2017). Given that in this case the evidence is related to the small-scale informal, artisanal mining and not operation of a large-scale mining sector, there is a possibility that there is no connection between this sector and child labour on one hand and exports to the EU (and the Agreement) on the other. The EU, in cooperation with UNIDO, provided assistance focused on sustainable mining, free from mercury.

2.2 Child labour in Peru

The Constitution of Peru contains provisions on special social protection of children and adolescents (Article 4). The Civil Code, the Children and Young Persons Code, the General Law on Labour Inspection, and a Decree on the impacts of hazardous work and night work on health of teenagers also regulate working activities of children. The minimum age for admission to work has been established by the Children and Young Persons Code at 14 years, and for certain sectors, it is at 15-18 years of age. According to the Ministry of Labour, adolescents being 15-17 years of age may work in certain types of work and with the authorisation of regional labour authorities. Work considered as hazardous is prohibited for persons under 18 years of age. In 2020, a Ministerial Decree (N°018-2020-TR) was issued, creating a new procedure for issuing permits for adolescents to carry out certain types of work. Also, in 2020 two laws were adopted (No. 31047 and No. 31110) on domestic work and work in agriculture respectively, prohibiting recruitment of persons under 18 years of age in these two sectors (information provided by the Government of Peru). In 2017-2019, technical regulations (resolutions) were adopted regarding labour inspections related to child labour and the work of a specialised group of inspectors in the labour inspection service (SUNAFIL) to address child labour and forced labour at workplaces. Its work is coordinated with an Interinstitutional Group including representatives of the Ministry of Labour, the Ministry of Women and Vulnerable Groups,

the Ministry of the Interior, the Ministry of Health, the Ministry of Agriculture, and the National Police, among others. In 2020, SUNAFIL concluded 478 inspection cases related to child labour. Out of these, 175 were in the wholesale and retail trade, 101 in hotels and restaurants, 52 in manufacturing, 49 in other services, and 28 in real estate. Moreover, in 2020, in those cases where the age of children engaged in child labour was recorded, 28 were under 14 years of age, i.e., below the minimum age of admission to work, four 14-15 years and 26 between 15 and 17 years (information provided by the Government of Peru).

At the policy level, the 2012-2021 National Strategy to Prevent and Eradicate Child Labour was adopted in 2012 (led by the Ministry of Labour and Employment Promotion), which sets out various measures aimed at eradication of child labour, grouped into six areas of action: 1) poverty, 2) education and leisure time, 3) social acceptance (of child labour), 4) working conditions, 5) protection, 6) information and awareness. The policy framework is complemented by the National Action Plan for Childhood and Adolescence 2012-2021 (led by the Ministry of Women and Vulnerable Groups) and the Interinstitutional Protocol against Forced Labour (Ministerio de Trabajo y Promoción del Empleo, ILO, 2016). Under the Semilla Project, the Ministry of Labour created the Child Labour Free Seal, which recognises products and services of companies whose operations are free from child labour (US Department of Labour, 2019). Peru joined the Alliance 8.7 to work towards the SDG 8.7 to eradicate forced labour, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labour by 2025.⁵

Like in Colombia, Peruvian authorities have taken several actions to reduce the incidence of child labour (for details, see Annex C-1 of the main report). Keeping in mind that different sources of data provide different figures, estimates for 2007 state that 3.3 million children aged 5 to 17 years were economically active in the country (ILO, IPEC, INEI, 2009). By 2015, their number decreased to 2 million (i.e., 26.1%⁶ of this age group and 47.6% among indigenous peoples),⁷ however, it was at the time the highest rate of child labour in Latin America (INEI, 2016; Peru21, 2018). In 2015, the rate equalled 52.3% in rural areas and 16.2% in urban areas, with higher rates for children of indigenous peoples (73.4% in rural areas) (INEI, 2017). According to data shared by the Government of Peru based on household surveys, the rate of persons of 5-17 years of age engaged in economic activity (i.e., also including those adolescents who worked based on a permit issued by authorities) decreased from 31.7% in 2012 to 25.3% in 2020 (12.8% in urban areas and 62.6% in rural areas). This means that between 2012 and 2020, 470,000 children and adolescents withdrew from economic activity. Boys (26.8%) worked more often than girls (23.7%). Regionally, the highest rate of children and adolescents engaged in economic activity was registered in the mountains, 46.9%, with 32.6% in the selva and only 9.4% in the coastal area. The incidence of engagement in economic activity was higher in poor families (32.9%) than in non-poor ones (21.7%). The primary sector (agriculture, fisheries, and mining) accounted for the largest share of working children (70.9%), followed by trade (15.4%), other services (8.7%) and manufacturing (3%). Moreover, the labour rate for children aged 5-17 years decreased from 14.8% in 2012 to 10.4% in 2019 and 12.0% in 2020, with the rate for boys (13.1%) being higher than for girls (10.8%). This means that between 2012 and 2019/2020, around 205,000 children and adolescents withdrew from child labour. The rate for rural areas (32.1%) was around six times higher than for urban ones (5.2%). Moreover, across the three big regions, the child labour rate for the mountain regions was 23.0%, in the selva regions 16.3% and in the coastal regions 3.7%. Also, the child labour rate was higher in poor families (14.9%) compared to the rest (10.6%). Finally, the primary sector, i.e., agriculture, fisheries and mining, accounted for

⁵ See website of the Alliance 8.7: https://www.alliance87.org/pathfinder_countries/peru-2/

⁶ This rate refers to all economically active persons aged 5 to 17 years, which also includes those adolescents with a permit to work under certain conditions and in certain occupations, as envisaged by the law.

⁷ From 2012 to 2016, the child labour rate fell from 31.7% to 26.7%, i.e., by around 370,000 (INEI, 2017).

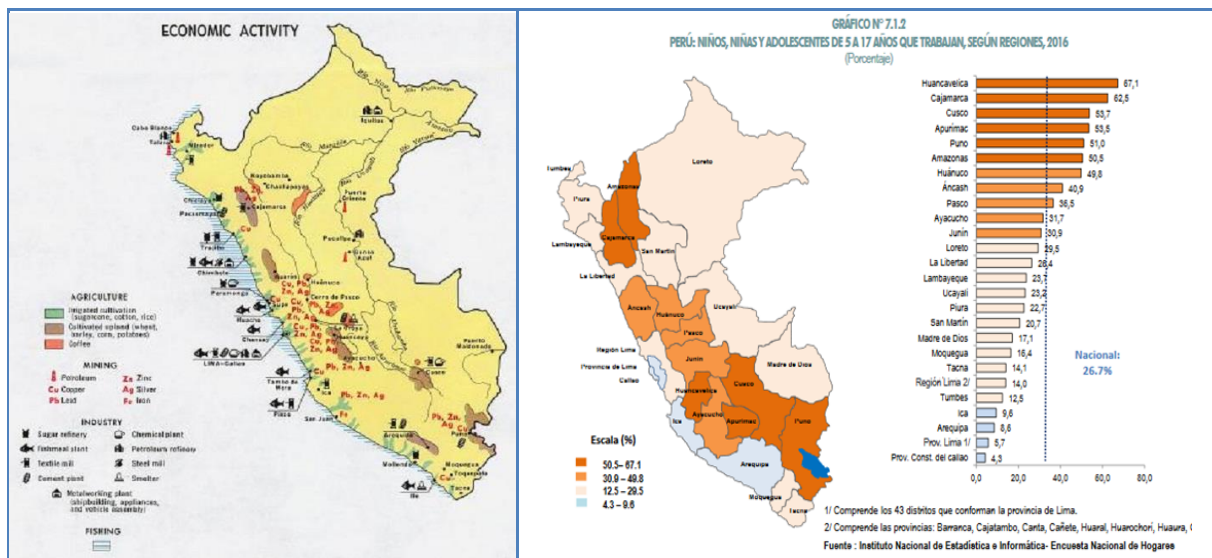
the largest share of child labour, i.e., 73.5%, followed by trade (14.5%), other services (7.6%) and manufacturing (2.1%) (information provided by the Government of Peru).

The UN Human Rights Council reports that in 2015, 16.8% (1.25 million) of children aged 5 to 17 years in Peru were involved in hazardous work.⁸ According to data shared by the Ministry of Labour, the rate of children of 5-17 years engaged in hazardous work decreased from 6.3% in 2012 to 3.4% in 2019 and 4.2% in 2020, which means that 160,000 persons withdrew from this type of work over the analysed period. In 2020, more boys than girls were involved in this type of work (4.8% and 3.5% respectively). The rate was also higher in rural areas (10.3%) than in urban ones (2.2%), and in poor families (4.5%) than in the rest of the population (4.0%). The primary sector, i.e., agriculture, fisheries and mining accounted for the largest share, at 63.3%, followed by trade (17.3%) and other services (11.5%).

The reasons behind child labour include poverty, discrimination, and lack of accessible quality education (INEI, 2017). Labour inspection (SUNAFIL) has an insufficient number of inspectors to effectively combat child labour. There is also a link between lower rates of child labour and regions with a more diversified economy, integrated into international trade and exports (e.g., agro-industry, fisheries, minerals, and textiles), developed infrastructure and better connectivity with the rest of the country and the world. On the other hand, regions with high child labour rates mostly rely on traditional sectors, incl. family and subsistence farming and mining (Ministerio de Trabajo y Promoción del Empleo, ILO, 2016).

In Peru, sectors recording employment increases thanks to the Agreement include e.g., vegetables, fruits and nuts, vegetable oils and fats, sugar cane, other food products, chemical products, and textiles and garments. Those which may witness job reductions include metals, pharmaceuticals, computer, electronic and electrical equipment.

Figure 2: Economic activity and regions with child labour incidence in Peru (2016)



Source: Mapa económico del Perú: <http://perumipais.com/wp-content/uploads/2019/02/produccion-peru-mapa.jpg> (left panel) INEI (2017), Perú: Características Sociodemográficas de niños, niñas y adolescentes que trabajan 2015; la Encuesta Nacional Especializada de Trabajo Infantil (ETI) 2015: https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitaes/Est/Lib1426/libro.pdf (right)

Regarding sectors benefitting from exports to the EU, in agriculture, child labour in Peru has been present e.g., in cultivation of coffee, cocoa, blueberries, asparagus and avocado,

⁸ UN Human Rights Council (2018). Report of the Working Group on the issue of human and transnational corporations and other business enterprises on its mission to Peru, UN Doc. A/HRC/38/48/Add.2.

(Desarrollo y Autogestión, Perú) mainly as part of family farms. However, through cooperatives and trade intermediaries buying produce from family farms and subcontracting work on plantations, products involving child labour may be integrated in value chains of goods exported *inter alia* to the EU. Moreover, given that whole families are hired during the harvest season (some migrating from other parts of the country), child labour may be part of it without being registered (the groups of casual workers are not checked for the presence of children and as the payment depends on the weight or number of harvested fruits or vegetables, the more family members participate in work, the higher the income is).

The frequently quoted reasons of continued child labour in agriculture include low-income levels not allowing for contracting adult workers to help on small farms and the custom of passing the agricultural practice between generations. The Peruvian Association of Cocoa Producers estimates, for example, that the cocoa price on the international market should increase by ca. 40% (from USD 2,300 to USD 3,200 per tonne) to ensure decent income for small farmers. There are also initiatives, such as the seal of products “free from child labour” launched in 2019 by the Government of Peru, which is granted to farmers who can demonstrate the absence of child labour use in their practice (Ojo público, August 2020).⁹ Representatives of coffee producers in Peru hope that the seal will help to differentiate “child labour free” products from others and gain them appreciation from international customers, which could then translate into higher prices and a sustainable possibility of using only adult workforce. NGOs supporting the initiative also highlight a need for it to be accompanied by targeted support for small-scale producers to improve their economic situation and enable their children to attend school (Gestión Perú, August 2019). Initiatives like the above are indeed complemented by awareness raising campaigns which explain to parents in rural areas that children should attend school and have time for rest in addition to learning agricultural activities, and should not be involved in work which may pose risks to their health and safety (Ojo público, August 2020). However, there is a need to ensure that they will cover all areas in the country where there is likelihood of child labour being involved in cultivation of agricultural products, and that they will be accompanied by economic support for small farmers.

The cultivation of blueberries in Peru is located in the regions of La Libertad (79%), Lambayeque (17%), Ica, Lima and Ancash. While around half of exports is destined for the US market, 25% go to the EU, with the Netherlands marked as an entry point. Given the growing production (from 2.6 thousand tonnes in 2014 to 179.8 thousand tonnes in 2020), investment, innovation, and exports outside of the harvest season in the northern hemisphere, Peru managed to benefit from increasing revenues (in the season of 2020-2021, they were projected to pass USD 1 billion) and higher prices than other producers. The country ranks first among world exporters. However, profit margins have been maintained *inter alia* thanks to the low labour costs, being in line with the special regime for agriculture. This is likely to change due to 2019-2020 amendments to the legislation (see details in section 6.1 of the main report) equalising part of workers’ rights in agriculture with other sectors of the economy (Peru Retail, February 2021). It was also estimated that in the 2020-2021 season, cultivation and harvest of blueberries would offer in total 100,000 jobs, out of which 52% would be occupied by women. Jobs covered by the special regime for agriculture are formal. Exporters from the sector feared, however, that a potential action by the US to limit imports in blueberries from Peru (by safeguards or

⁹ The seal “Free from child labour” (Sello Libre de Trabajo Infantil – SELTI) is awarded to legal persons who can prove compliance with requirements related to prevention and elimination of child labour from their chains of production or supply of services. Each such company needs to develop a plan of Corporate Social Responsibility outlining how child labour will be prevented and eliminated from their operations and how school attendance of children will be supported in the areas of their activity and influence. In the first round, the award was granted to seven entities with legal personality operating in agriculture who proved the lack of child labour in their work, in supply chains of cacao, coffee, curcuma, and ginger. These represented 924 agricultural families, 1240 small producers and 283 agriculture workers trained in or being made aware of aspects related to child labour.

TRQs) may put some jobs in the sector at risk (AgroNoticias, October 2020). Given the presence of child labour in the cultivation of blueberries, the sector will also look at the possibility to use and promote "child labour free" seal as one of the ways of eliminating child labour (Gestión Perú, August 2019). Other measures include the exchange of best practices with other countries in the region such as Argentina, which developed a pilot project to eliminate child labour from the production of yerba mate and blueberries. The concept of the project has been presented at a workshop in Lima. It assumes an analysis of the value chain, identification of weak points and stages where child labour may be involved, optimisation of the production model of participating enterprises and, provision of education and health care services facilitating removal of children from work (Desarrollo y Autogestión, (a)). By ensuring duty-free exports of fruits and vegetables to the EU, the Agreement has created an opportunity for increased exports, effectively used by producers of blueberries from Peru. Given favourable prices obtained by Peru (higher than its competitors), the country managed to maintain profit margins and thus create formal jobs in the sector, potentially also reducing poverty in the regions where blueberries are grown. Moving forward, it will be important to use policy dialogue in the TSD Title, technical assistance and commercial mechanisms, incl. export promotion to raise awareness (among both, producers and customers) of the child labour free seal to obtain decent prices for exported blueberries (and other agricultural products, such as coffee, using it) which in turn would enable implementing an amended special regime for agriculture (with improved workers' rights for adult workers) and eliminate the use of child labour from the sector.

According to 2016 data, the textile and garment sector in Peru, incl. cotton cultivation, provided jobs to some 400,000 persons (2.5% of the total employment in the country). Cotton cultivation was pursued by 8,425 farms, 60% of which did not exceed 5 hectares, which means that small-scale family farms played an important role in the sector. Since the year 2000, however, the area used for cotton cultivation had decreased considerably due to low prices, competition of cotton fibre and fabrics from Asia, the financial crisis of 2008-2009, which reduced demand for Peruvian cotton, and the lack of public policy and support that would encourage further development of the cotton value chain in Peru, with a focus on high-quality fabrics and identification of market niches where Peruvian products would be competitive. In 2016, some 80% of workforce¹⁰ in the cotton sector was informal and included short-term workers hired for the cotton harvest. They usually earned less than the minimum wage and did not have social security cover. Child labour was involved in the sector mainly at the time of the harvest and often included children of temporary workers who were hired for the harvest (ILO, Agencia Brasileña de Cooperación, 2016).

In 2019, the textile and garment sector continued to offer direct jobs to 400,000 persons¹¹ (equalling 26.2% of the employment in manufacturing, and 2.3% of the total employment in the country) and generated 900,000 indirect jobs. The level of informality was at 78.1%, while among workers in microenterprises accounting for 80% jobs in the sector, the level of informality was at 88.7%. Garment production had a 76.3% share in the employment in the sector, with textile taking the rest (23.7%). Women represented 61.5% of workers in the sector (IESS, 2021). In 2018, Peru signed a cooperation agreement with Brazil aimed at the exchange of good practices to learn from the Brazilian experience in promoting decent work in the cotton value chain, poverty reduction, prevention and elimination of child labour and forced labour, formalization of work, jobs for youth, vocational training and capability building, health, and safety at work and social dialogue (El Comercio, December 2018). According to information provided by the Ministry of Labour, the exchange of experience also involved representatives of Argentina and Mexico, and in all three cases (incl. Brazil) information campaigns and materials have been developed to raise awareness of producing families, employers, and public officials about the problem of child labour and its worst forms. Peruvian labour inspectors also participated in workshops

¹⁰ This means an increase in informality, from 72% in 2015 (IESS, 2021).

¹¹ However, in 2017, there was a short increase in employment, up to 463,300 persons (IESS, 2021).

with counterparts from Brazil and Paraguay to exchange practices about work in rural areas and elimination of child labour in the cotton sector (ILO, 2019d). The EU has supported, in cooperation with the ILO, the elimination of child labour from cotton cultivation in Peru through the “Clean cotton” project, aiming at ensuring decent work conditions for working adults, awareness raising among families of working children, capacity building of state institutions and trade unions to reduce and eliminate child labour, and improved access to education for children from rural areas (El Confidencial, November 2018). The project covered the whole cotton value chain and was implemented in cooperation with actors involved at each stage, as well as relevant state institutions. It included, e.g., design of information leaflets about health and safety at work for cotton farmers.

To illustrate the overall possible impact of the Agreement on child labour in the sector, we note that according to the economic modelling, the Agreement is estimated to have contributed to a 0.3% employment increase in the sector, which would mean the generation of some 1,200 jobs or protection of this number of jobs against a trend of decreasing employment. It is more difficult however to draw conclusions on the nature of jobs (formal or informal), given the high informality rate in the sector. It may be the case that a mix of formal and informal jobs benefitted from the Agreement in different occupational categories, along the value chain. In such a case, exports to the EU could have helped to create or preserve jobs and to reduce poverty or prevent some workers from falling into poverty given a decreasing employment trend in the sector. This in turn may mean less need for child labour and less poverty among children. However, it may also not influence much the situation around child labour if mainly children of temporary workers join work (in such a case, those children would probably continue coming to the harvest and participating in it with their parents, unless the latter receive an opportunity of a more sustainable, long-term employment and income generation).

Child labour is also present in mining in the regions of Ica, Ayacucho, Arequipa, La Libertad, Huancavelica, and Piura in small-scale underground gold mines,¹² and in Madre de Dios, in open-air gold extraction. Regarding non-metals mining, child labour has been identified in sand, clay, and precious stones exploitation. Working children and adolescents are exposed to hazardous substances, noise in underground mines, vibrations, extreme temperatures, heavy loads, repetitive movements overburdening certain parts of the body, health and safety risks related to operation of heavy machines, and life in a mostly masculine environment, characterised by high consumption of tobacco and alcohol, and high levels of aggression, which may also turn into violence and abuse of young women working in the neighbouring areas. Work in mining does not allow for dedication of much time to education and in some mining areas, there are no schools. Moreover, the work remains informal, and children receive worse contractual conditions than adult workers.¹³ There are, however, examples of good practice preventing and eliminating child labour in mines. In Santa Filomena (Ayacucho), it has been prohibited for children to come to a mine, and a school has been established in the community to facilitate education, but also to enable parents to come to work not being accompanied by children (ILO, 2017c). A similar practice with education for children, health care advisory services and additional income generation opportunities for parents has been developed in Mollehuaca (Arequipa) (Ministerio del Trabajo, Colombia, 2017a).

In the context of the above, it is worthwhile to note that SUNAFIL carries out inspections aimed at addressing child labour, including the prevention of risks and the elimination of those forms of child labour which are not permitted by the law and authorised by the relevant institutions. SUNAFIL reports that in 2020 it carried out 427 inspections covering all types of work of children and adolescents, including authorised work and the worst

¹² In the early 2000s, around 30,000 families in Peru lived from income generation in gold mining (Ministerio del Trabajo, Colombia, 2017a).

¹³ Ministerio de Energía y Minas, Protejamos a nuestros niños del trabajo infantil: <http://intranet2.minem.gob.pe/ProyectoDGE/Mineria/TRIPTICO%20-%20Trabajo%20Infantil.PDF>

forms of child labour. The highest number of inspections related to wholesale and retail trade, followed by hotels and restaurants, manufacturing, other services, real estate, and transport.

2.3 Child labour in Ecuador

The Constitution prohibits forced labour, human trafficking, and all forms of exploitation, including the use of children for illicit activities (Arts. 46 & 66). The Criminal Code of Ecuador criminalises the exaction of forced labour or other forms of exploitation (Art. 105) as well as sex and labour trafficking (Arts. 91 & 92), prescribing penalties ranging from 10 to 13 years of imprisonment for forced labour, and from 13 to 16 years for sex and labour trafficking.¹⁴ The Childhood and Adolescence Code sets the minimum age for work at 15 years of age, and the minimum age for hazardous work at 18. Resolution No. 16 (2008) prohibits children under the age of 18 years from working in certain economic activities. The Labour Code authorises labour inspectors to conduct inspections.

The policy framework includes various measures to combat forced labour, human trafficking and child labour: e.g., the Organic Act on human mobility, the National Plan to Combat Trafficking in Persons, the 2012-2021 National Action Plan for Childhood and Adolescence, the 2017-2021 National Agenda for Intergenerational Equality, and the 2017-2021 National Development Plan. The Unified System of Registration of Child Labour has been upgraded.¹⁵ Moreover, according to the Ministry of Labour, in 2021 the Government adopted a Decree to promote and facilitate formal employment of parents of children being at risk of child labour. The new Government has also undertaken a number of steps to engage with international partners as well as employer and worker organisations to address challenges related to child labour. This also includes cooperation with the EU, which under the Socieux+ programme provides support for developing institutional capacity to address child labour, including for labour inspection services and representatives of the private sector. Under another programme financed by the EU (Eurosocal+), instruments of public policy to prevent, address and eliminate child labour have been developed.

It is difficult to estimate the real scale of child labour in Ecuador due to the lack of updated statistics, which also hampered the effectiveness of measures to combat child labour.¹⁶ The UN Committee on the Rights of the Child recommended Ecuador in 2017 to intensify its efforts in combatting child labour in all sectors of the economy and to establish programmes at the local and cantonal levels to implement the national strategy against child labour.¹⁷

According to information shared by the Ministry of Labour of Ecuador, in 2017-2020, 13,316 labour inspections were undertaken, aiming to identify children and adolescents in a situation of child labour. In 2021, 7,363 such inspections were conducted in sectors with the highest incidences of child labour. Moreover, 47 inspections were undertaken in 2021 in the banana sector, as part of the National Project to Eradicate Child Labour. In addition, technical assistance was provided to local authorities, supporting development of their own regulations and actions to eradicate child labour, and 80,398 persons were involved in training and awareness raising activities related to child labour. 990 children and

¹⁴ Código Orgánico Integral Penal del Ecuador: https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/ECU/INT_CEDAW_ARL_ECU_18950_S.pdf

¹⁵ U.S. Department of Labor, Bureau of International Labor Affairs, Child Labor and Forced Labor Reports – Ecuador: <https://www.dol.gov/agencies/ilab/resources/reports/child-labor/ecuador>

¹⁶ BTI (2020). Country Report Ecuador: <https://www.bti-project.org/en/reports/country-report-ECU.html>

¹⁷ United Nations Committee on the Rights of the Child (2017). Concluding observations on the combined fifth and sixth periodic reports of Ecuador, UN Doc. CRC/C/ECU/CO/4-5.

adolescents were removed from child labour and provided with support to recover their rights.¹⁸

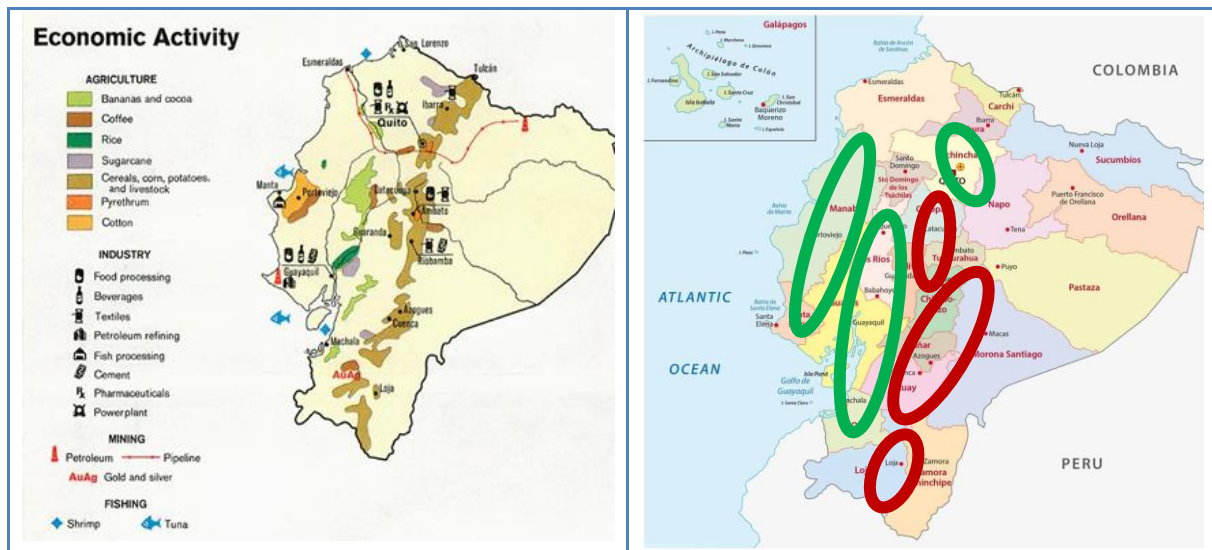
The child labour rate among children aged 5 to 17 years decreased in the country from 17% in 2006 (INEC, UNICEF, 2015) to 8.4% in 2017 (375,342 persons) (El Comercio, June 2019; Plan V, June 2020). It is however estimated that, due to Covid-19 and the increasing unemployment among adults and family poverty, child labour may increase again (UNICEF, June 2020). According to a focused national survey carried out in 2012 (INEC, 2012a), 8.6% of children and teenagers aged 5 to 17 years were engaged in an economic activity (15.5% in rural areas and 4.3% in urban areas), whereas the rate for indigenous peoples was much higher (29%). Agriculture was the main activity for 66% of working children aged 5-14 years, and 50% of teenagers aged 15-17 years¹⁹ (Plan V, June 2020). Departments with a high child labour incidence overlap partly with those having also high poverty rates (e.g., Cotopaxi, Bolívar, and Chimborazo), while the coastal departments and Pichincha were in 2014 among those recording the lowest poverty rates (INEC, 2015).

Sectors benefitting from the Agreement include vegetables, fruits and nuts, cereals, fisheries, other food products, apparel, and metal products. On the other hand, sectors, such as metals, motor vehicles, textiles, leather products, chemical products, rubber and plastics, pharmaceuticals, and paper products may be negatively affected.

In agriculture, child labour has been identified in banana and palm oil plantations, flowers and the abacá sector, as well as in fishing. In industry, child labour has been reported in small-scale mining, gold mining and production of bricks, and in services, in construction, as well as in other services, which may not be impacted by the Agreement, e.g., domestic services, shoe cleaning, and selling products (e.g., newspapers) in the streets. There are assistance projects focused, e.g., on reducing the incidence of child labour in the palm oil sector (US Department of Labour, 2019a), and producers and exporters of flowers cooperate with government and trade unions to remove child labour also from this sector (ILO, 2017c). The majority of children working in agriculture in rural areas is not remunerated (in 2012, it was 91%), which suggests work as non-paid family members. Moreover, even if they receive payment, the amounts are usually very low. The poverty rates and job opportunities for adults have been closely related to child labour incidence. Over the last two decades, periods of economic growth and job creation went hand in hand with decreasing poverty and child labour incidence, while economic slowdown provoked an increase in both. A higher incidence of child labour is also recorded in poor families where a short-term gain from additional work carried out and generated income prevails over long-term investment in education and skills development (Consejo Nacional para la Igualdad Intergeneracional, 2018).

¹⁸ Updated data for the period 2018-2021 for the same categories included 17,704 labour inspections aiming to identify children and adolescents in a situation of child labour. They were carried out mainly in diverse sectors of agriculture, including banana, rice, tropical fruits, oil palms, and flowers, as well as fisheries, mining, construction and trade. Moreover, there were 1,655 cases of technical assistance for local authorities supporting development of their own regulations and actions to eradicate child labour, 78,212 persons were involved in training and awareness raising activities related to child labour and 1,162 children and adolescents were removed from child labour and provided with support to recover their rights.

¹⁹ Plan V (June 2020), El trabajo infantil en Ecuador aumentará por la pandemia: <https://www.planv.com.ec/historias/sociedad/el-trabajo-infantil-ecuador-aumentara-la-pandemia>

Figure 3: Economic activity and regions with child labour incidence in Ecuador

Red shape – high level of child labour; **Green shape** – low level of child labour

Source: Proyecto Mapamundi: <https://proyectomapamundi.com/america-del-sur/ecuador/> (right), Mapa Owje: https://mapas.owje.com/1938_mapa-de-actividad-economica-de-ecuador.html (left)

The flower sector in Ecuador provided 100,000 jobs in 2019 and 21% of exports were destined to the EU market, with the US being the main customer receiving 44% of exports in the sector (Expoflores, 2019). Flower cultivation takes place in provinces of Pichincha, Cotopaxi, Carchi, Imbabura, and Azuay (Fairtrade). In 2000, an ILO study evaluated child labour incidence in the sector in provinces of Pichincha and Cotopaxi, concluding that children below 15 years of age were involved in work, along with older adolescents, the latter carrying out hazardous work, working long hours, receiving low wages, and not having access to school. Since then, several projects were implemented covering in total 13,100 children (some of them were financed by EU Member States). Training and awareness raising activities have been provided to employers, workers, and local communities, and children received facilitated access to education and leisure activities. A certification scheme, Flor Ecuador, has also been set up to ensure compliance with labour and environmental standards, and has been made obligatory for members of Expoflores, an association of flower growers and exporters. In the labour-related part, it includes, among others, a requirement to prevent and eradicate child labour, to pay social security contributions for workers, to formalise work of adolescents and to respect norms in health and safety at work. It has been recognised internationally. In 2019, 81 enterprises from the flower sector in Ecuador were certified and 20 in the process of certification. Experience developed in this context can also be replicated in other sectors (Expoflores, 2019).

Regarding the banana sector, a survey carried out by ASTAC among workers in the sector suggests challenging working conditions and an overall low job quality. However, the report does not mention cases of child labour which may suggest that these are not too frequent, at least in areas covered by the survey and by ASTAC operations (ASTAC, 2019). According to information provided by the Ministry of Labour, there has been cooperation with the Association of Banana Exporters of Ecuador (AEBE), the Association of Banana Producers and with medium-sized and small-scale banana producers to raise awareness related to child labour, and work towards elimination of child labour and restitution of rights of children removed from work in the sector. A substantial decrease in the work of children under 15 years of age in the sector has been observed in the last few years. Consulted industry stakeholders also highlight that, among others, awareness raising campaigns regarding child labour and the existence of an adequate legislative framework and the TSD Title have had a potential positive impact for the overall respect for core labour standards, including the elimination of child labour.

Regarding activities undertaken by the Government in other sectors, these were reported by the Ministry of Labour as follows:

- As part of the policy of zero tolerance for child labour in value chains, an agreement on cooperation and co-responsibility has been reached with representatives of the flower, mining and fisheries sectors, and around 22,175 persons received training on related aspects.
- In the palm oil sector, in cooperation with a civil society organisation (Partners of the Americas), awareness raising and capability building actions were organised with 65 companies belonging to the associations Propalma and Proamazonas, to introduce a policy of zero tolerance for child labour in their value chains and set up a mechanism to re-establish rights of children removed from work in the sector.
- In the fisheries sector, inspections were carried out. Moreover, technical assistance has been provided to local authorities to enable them to exercise monitoring of compliance with the national legislation by enterprises in the sector. In addition, the National Chamber of Fisheries is introducing a policy of zero tolerance for child labour in the sector.
- In the mining sector, there is ongoing cooperation with Colombia in addressing child labour.
- In the construction sector, after cases of work of adolescents were identified, monitoring of the enterprises in the sector has been tightened.
- In informal trade, there is ongoing cooperation with local authorities to identify cases of child labour and to re-establish the rights of children removed from that work.

Finally, the Ministry of Labour has concluded an agreement with the Association of Municipalities of Ecuador, in the framework of which 188 out of the 221 municipalities in the country have put in place a policy and accompanying instruments to prevent and eradicate child labour (information provided by the Government of Ecuador).

CASE STUDY 8 – FREEDOM OF ASSOCIATION IN SECTORS IN COLOMBIA, PERU AND ECUADOR INVOLVED IN EXPORTS TO THE EU

1 INTRODUCTION

1.1 References in international human rights law

Art. 20 of the Universal Declaration of Human Rights (UDHR) states that “(1) Everyone has the right to freedom of peaceful assembly and association. (2) No one may be compelled to belong to an association”. Articles 21 and 22 of the International Covenant on Civil and Political Rights (ICCPR) also refer to the right of peaceful assembly and the right to freedom of association (including the right to form and join trade unions). The right to form and join trade unions is also provided for in Article 8(1) of the International Covenant on Economic, Social and Cultural Rights (ICESCR). All Parties to the Trade Agreement ratified both the ICCPR and the ICESCR. None of the Andean countries has expressed reservations with respect to the Art. 21 and 22 of the ICCPR or with respect to the Art 8 of the ICESCR. All Parties to the Agreement also ratified ILO Conventions No. 87 and No. 98 that cover freedom of association, the right to organise and collective bargaining and form core labour standards to promote decent terms and conditions of work and balance between workers and employers in the workplace.

1.2 References in regional human rights instruments

Article 12(1) of the EU Charter of Fundamental Rights states that “Everyone has the right to freedom of peaceful assembly and to freedom of association at all levels, in particular in political, trade union and civic matters, which implies the right of everyone to form and to join trade unions for the protection of his or her interests”. All EU Member States are bound by the EU Charter when they are implementing EU law.¹

The American Convention on Human Rights (Articles 15 and 16) also covers the right of assembly and freedom of association. Colombia, Peru and Ecuador are parties to it.

1.3 References in the EU Trade Agreement with the Andean countries

Article 269(3)(a) of the Agreement reaffirms the obligations of the states regarding freedom of association as laid down in the ILO Fundamental Conventions (No. 87 and No. 98). Further, Article 277 includes commitments of the Parties not to lower the existing levels of protection with respect to labour rights, referring to both the legal framework and implementation of the existing laws.

2 FREEDOM OF ASSOCIATION IN COLOMBIA

2.1 Right to peaceful assembly and association in Colombia

Freedom of assembly and freedom of association are guaranteed by the Constitution (Arts. 37 and 38, respectively). Moreover, Article 200 of the Penal Code envisages penalties of 1-2 years of imprisonment and payment of equivalent of 100-300 monthly minimum wages for those who would interfere in the exercise of legitimate labour rights, including for those who would exercise repression against workers for participation in a legal strike, meeting or association and for those who would agree collective pacts with non-unionised

¹ See *Front Polisario case* on the EU human rights obligations towards foreign person potentially affected by EU trade agreements in third countries.

workers envisaging better conditions than collective agreements with trade unions reached in the same enterprise (information provided by the Ministry of Labour).

In practice, freedom of association is restricted by violence. Since 2016, the International Trade Union Confederation (ITUC) Global Rights Index ranks Colombia as one of the ten worst countries for workers in the world (ITUC Global Index Reports 2014-2020). Although the situation has been improving in the last few years, the UN monitoring bodies note that violence against human rights defenders has persisted (UN Committee on Economic Social and Cultural Rights, 2017; UN Committee on the Rights of the Child, 2015). Civil society organisations are reported to face the risk of physical danger from illegal armed groups, especially in rural areas.² Freedom House states that the Duque administration has reiterated its support for civil society organisations and signed an agreement in August 2018 for developing more effective protection policies, which however did not lead to major improvements (Freedom House, 2020). The Bertelsmann Foundation reports that only 5% of investigations on the cases of homicides of human rights advocates by the General Attorney's office have led to court cases (BTI, 2020, UN Human Rights Council, 2019).

Workers may **form and join trade unions**, and bargain collectively. Anti-union discrimination is prohibited, however joining a trade union is limited by legal requirements (Constitution of Colombia, Articles 55 and 56). This is reflected in the low rates of union membership over the evaluation period and in the large number of strikes that were declared illegal (UN Committee on Economic Social and Cultural Rights, 2017). However, as outlined in Tables 7 and 8 in Annex C-1, the number of trade unions increased from 2,768 in 2005 to 5,523 in 2017, with the number of trade union members increasing from 811,850 in 2010 to 1,028,764 in 2017 (ENS, 2008; 2011; 2016; 2018; Sislab). At the same time, the ILO and stakeholders note that illegal worker representation practices have become common, more precisely the continuous practice of negotiating collective pacts (over 200 a year) with non-unionised workers (ITUC, 2019a; ILO, 2019f; Forero, 2016; ODHACO & Catapa, 2020; OECD TUAC, March 2018, and May 2018).

While violence against trade union activists has decreased due to the implementation of President Uribe's "Democratic security" program (BTI, 2016), with the total number of cases of violence falling from 431 in 2011 and 654 in 2012 to 234 in 2018 and 70 in the first half of 2019 (Sinderh, ENS). 19 unionists were murdered in 2020 (with the total number of murders being over 20 annually in the last decade and reaching 37 in 2013) (see Table 8 in Annex C-1) (ENS, 2021). According to the ENS, such economic sectors as education, agriculture and fishing, and mining are the three top sectors where violence against trade union activists is most common (Escuela Nacional Sindical, 2020).

Prosecutions of those responsible for the violence and the killings remain low (Naciones Unidas, 2020). The Office of the Prosecutor General received in total in 2017-2020, 865 cases of violence of the right to association and peaceful assembly. At the beginning of 2021, 714 of those cases were closed and 151 (i.e., 17.5%) were active. Out of all closed cases, in 59, the parties involved reached an agreement through conciliation, in 95 cases, an agreement was reached between the worker or trade union and the enterprise, and in 68, the prosecution decided to continue investigation under another criminal title. 407 cases were archived mostly due to lack of an identified criminal offence and 87 cases were closed for other reasons (Information provided by the Ministry of Labour).

Various measures have been taken to ensure protection of trade union representatives and address high level of impunity for crimes against them: through the creation of the National Protection Unit, special arrangements within the Prosecutor General's Office to look into the patterns of murders against trade union representatives, targeted training for judicial workers provided by the ILO, etc. However, progress has been considered as insufficient

² See BTI Colombia reports for 2008, 2010, 2012, 2014, 2016, 2018 and 2020; and Oidhaco & Catapa (2020).

as impunity for crimes against trade union representatives remains, the rates of collective bargaining are still low and multiple complaints are submitted to the ILO related to the violations of the Conventions No. 87 and 98:³ cancellation of trade union registration, the practice of negotiating collective pacts with non-unionised workers (ITUC, 2019a) and limitations with respect to the right to strike (e.g. the Avianca case, where the Supreme Court declared the strike of pilots unlawful because the right to strike is not a fundamental right and is prohibited in essential public services) (Corte Suprema de Justicia, 2017).

2.2 Freedom of association in Colombia in sectors exporting to the EU

Regarding the sectors exporting to the EU, in the **banana** sector (in 2018, 65% of exports were destined to the EU), over 18,000 banana workers in 266 medium-sized and large plantations in the Urabá region (dep. of Antioquia) are represented by the agricultural workers' union SINTRAINAGRO (Sindicato Nacional de Trabajadores de la Industria Agropecuario), which is active also in the palm oil, sugar cane and flower sector (Banana Link, SINTRAINAGRO). The union was established in the Urabá region in 1988 and lost over 700 activists who were murdered by illegal armed groups operating at the time in the region. Currently, banana workers in the Urabá region are covered by a collective agreement, renewed every two years, with the latest one signed in 2019 by employers supported by AUGURA (Banana Association of Colombia bringing together producers and traders of bananas from departments of Antioquia and Magdalena) and SINTRAINAGRO. The agreement applies to some 22,000 workers out of the total of 25,000 (according to other sources, 35,000) directly employed in the sector. Trade union affiliation in the banana sector in the Urabá region is 98%, and most workers are contracted directly (instead of under sub-contracts) (Cooper, Quesada; Augura, 2021; COLSIBA, September 2019).

In the **palm oil** sector, which in 2018 provided around 170,000 direct and indirect jobs in Colombia, trade unions have also been present and active. However, like in other agricultural sectors, they have been affected by acts of anti-union persecution, discrimination, and violence. Only 5% of the direct workers in the sector are represented by trade unions. Most indirect workers (representing 80% of workers in the sector) are not covered by collective agreements. There are four trade unions: SINTRATERCERIZADOS (for sub-contracted workers), SINTRAINAGRO, SINTRAPALMAS (represents workers in the region of Puerto Wilches) and the General Union of Third-Party Agribusiness Workers (UGTTA) set up in 2018 and representing around 1,000 workers from the sector. European trade unions (e.g., from Denmark and the Netherlands) have been supporting social dialogue in the sector. Employers are represented in the sector by the National Federation of Oil Palm Growers (Fedepalma). Sub-contracting has been the main issue in social dialogue (Quiroz, Achterberg, Arnould, 2021).

In 2019, the **sugar cane** sector provided 286,000 jobs along the supply chain, with cultivation located in six departments Valle del Cauca, Cauca, Risaralda, Caldas, Quindío and Meta (Asocaña, 2020). Prior to the entry into force of the Agreement, based on the Obama-Santos Plan, work in most plantations has been formalised, workers have been contracted directly by the enterprises and their right to form and join trade unions has been recognised. However, still in 2013, there were a few plantations in Valle del Cauca where workers were sub-contracted, and their fixed-term contracts were not renewed for affiliation to trade unions. Others were receiving threats or were asked to renounce membership in trade unions to get new contracts (AIL, January 2013). Workers from the sector interviewed in 2020 admitted substantial changes in their situation thanks to the formalisation of work and trade union membership which provides protection of their rights and stability. Benefits include: They receive a basic salary increased by a factor of harvested sugar cane, those who developed disability at work receive income also at least

³ ILO recorded 38 complaints procedures on freedom of association cases. 25 of them are active, see https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11110:0::NO::P11110_COUNTRY_ID:102595

equal to the minimum wage, workers also have holidays, work shorter hours, have breaks for rest and receive protective equipment. In 2020, during the COVID-19 pandemic, older workers were sent home and received basic salaries, and in plantations, protective measures were taken, such as social distancing in transport to work. However, workers still refer to cases of discrimination for trade union activity, such as preferences for non-affiliated workers for promotion for other jobs within the company (AIL, October 2020). Trade unions in the sector are represented by SINTRAINCABANA whose leader was killed in March 2020, SINTRATERCERIZADOS (for sub-contracted workers), and SINTRAINAGRO (Quiroz, Kuepper, Rijk, Achterberg, 2021). Employers are represented by Asocaña.

The **mining** sector provided 150,000-350,000 direct jobs and almost 1 million of indirect ones in 2019 compared to 202,000 in 2013 (Unidad de Planeación Minero Energética, 2014). It also belongs to sectors with lower levels of informality with 35.8% of jobs being informal in 2019 (Radio Caracol, May 2019; Actualícese, Sept. 2019). In the coal mining sector, jobs seem to be formal, however, like in Peru, between half and two thirds of workers are sub-contracted. Trade unions include Sintracerrejon, Sintradem, Sintradrummond, Sintracarbón, and Sinterminenergética. They represent direct employees but not sub-contracted workers (CNV Internationaal, 2021). Trade union representatives interviewed in 2021 (at the anniversary of the US-Colombia Labour Action Plan) acknowledged an improvement of the situation in the sector over the last ten years regarding respect for workers' rights thanks to the Labour Action Plan. They emphasise a greater respect for trade unions, however, see room for further improvement, including a move from sub-contracting to direct employment of workers, at least those carrying out tasks classified as core activities, and a future ratification by Colombia of the ILO Convention No. 176 on health and safety at work in the mining sector (AIL, April 2021). Trade unions also take part in capacity building initiatives, including in cooperation with international and national trade unions (e.g., from Canada and Finland), focus on including sub-contracted workers and engagement with local communities in regions with mining activities to pursue respect for their rights and workers' rights, protect natural resources and mark a move towards sustainable mining (Asociación Minga, April 2019; Industrial October 2013; November 2019).

Civil society representatives interviewed for this study emphasised a need for a calmer, more moderate political discourse, and avoidance of terms which may increase tensions in the society and further put at risk the security of trade union leaders and members. Moreover, in their view, the Government should increase efforts to ensure protection of trade union leaders and labour and environmental activists. It should also strengthen the capacity of labour inspection and prosecution to ensure protection and enforcement of rights. Furthermore, there is a need for a more effective implementation by Colombia of commitments enshrined in the Agreement and its TSD Title, as well as rulings of the Colombian courts and recommendations of the ILO monitoring bodies. Finally, there is room for improvement of the dialogue between civil society and the Government and follow-up to civil society recommendations.

The above analysis indicates that over the last decade, the situation of trade unions in Colombia was mainly shaped by the security situation in the country, the Labour Action Plan adopted with the US and the macroeconomic developments which influenced creation of formal jobs on one hand and preserved structures with sub-contracted workers in some sectors (e.g., in mining) on the other, to cut costs in international competition. The Agreement with the EU is likely to have had a more limited impact, including through assistance projects (e.g., mining free from mercury) technical assistance and capacity building (also by EU Member States and European trade unions), dialogue under the TSD Title between Governments and civil society engagement.

3 FREEDOM OF ASSOCIATION IN PERU

3.1 *Right to peaceful assembly and association in Peru*

The freedom of assembly and association are provided for in Article 2 of the Peruvian Constitution. The Law on Collective Labour Relations (2003) provides regulations on trade unions' rights in private and public sector. The Civil Service Law No. 35007 (2016) establishes workers' rights in the public sector, replacing the Civil Service Law of 2013. The UN reports that many social protests in Peru result in violent clashes with the police and the Armed Forces (UNGA, 2018). Violence against human rights defenders is common (EU Annual Reports on Human Rights 2013-2019; Naciones Unidas, 2020a), notably in protests related to extractive industries, land rights, and resource allocation (EPRS, 2018; Movimiento Ciudadano, 2020). The state Ombudsman Office and the National Office of Dialogue and Sustainability (ONDS) have taken action that has facilitated a reduction in protest-related violence. The National Action Plan on Human Rights was adopted. It proposes the creation of a mechanism for the protection of human rights defenders by 2021 (UNGA, 2018). However, environmental activists who discourage land development continue to face intimidation (FDCL, 2018).

Peruvian law recognizes the right of workers to organize and bargain collectively. Strikes are also legal with advance notification to the Ministry of Labour (Art. 28 and 29 of the Constitution). The Regulation on the Collective Work Relations Law defines conditions to issue a trade union license and the necessary criteria for declaring a strike. However, in practice, the Bertelsmann Foundation reports that trade union activity is hampered by regulations that dilute certain labour rights, by the large informal sector, and by high numbers of short-term contracts (BTI, 2020). This is also reflected in the complaints submitted to the ILO (ILO, country profile – Peru). The Plataforma Europa Perú filed a complaint to the European Commission noting multiple violations of freedom of association in Peru (Queja contra el gobierno peruano, 2017). The platform TrabajoDigno.pe reported that the number of unionised workers in the non-traditional export regime decreased from 4.2% in 2008 to 3.3% in 2016, and the salaries of unionised workers were substantially higher than the salaries of non-unionised workers (TrabajoDigno.pe portal, June 2017). The UN Human Rights Council reports that only 6% of formal workers in the private sector and 13% of workers in the public sector were unionised in 2018 (UN Human Rights Council, 2018). The highest number of trade union members are registered in such sectors as construction, mining, fisheries, and the manufacturing industry. Moreover, in 2020, a new Law (No. 31110) was adopted which includes the promotion of freedom of association and the right to collective bargaining in agriculture and the agro-industry, acknowledging that in this sector workers face difficulties in exercising their rights due to temporary or seasonal forms of employment and changes of employers. The Law prohibits any action from employers that could interfere or impede freedom of association and the right to collective bargaining. It also mandates the National Labour Council to provide a forum for discussion about working conditions in agriculture.⁴ In addition, regulations setting out minimum rights and the right to collective bargaining in the sector were adopted.⁵

3.2 *Freedom of association in Peru in sectors exporting to the EU*

Regarding sectors exporting to the EU, in **mining** (see Table 10 in Annex C-1) the number of trade union members increased from 13,395 in 2007 to 27,151 in 2019 with the share of affiliated workers total sector employment increasing from 20.1% in 2007 to 25.6% in 2019. The number of trade union members was higher between 2007 and 2013, i.e., in

⁴ Law No. 31110 of 31 December 2020: <https://cdn.www.gob.pe/uploads/document/file/1535274/Ley%2031110.pdf>

⁵ Decreto Supremo N° 005-2021-MIDAGRI, Reglamento General de la Ley, and Decreto Supremo N° 006-2021-TR, Reglamento específico referido a la negociación colectiva de los trabajadores regidos por la Ley N° 31110.

the period of economic growth supported by high prices of exported oil and then fell during the economic slowdown and fall in global oil prices (in parallel with a decreasing number of workers in the sector from 2012 to 2016, which meant a lower number of potential trade union members) (Ministerio de Energía y Minas, 2019a). The majority of workers (67.9% in 2019) are sub-contracted (Ministerio de Energía y Minas, 2019). Trade unions (currently 97 in the sector, with the Federación Nacional de Trabajadores Mineros Metalúrgicos y Siderúrgicos del Perú, set up in 1969, being the main one) request ending the practice of sub-contracting, except for highly specialised work, and strengthening the capacity of labour inspection to ensure respect of workers' rights including health and safety at work. Moreover, they demand termination of any special regimes in the economy and advocate collective bargaining at the sector level to ensure equal conditions of work for all trade unions and workers in the sector (Gestión, December 2020a).

In **agriculture**, domestic legislation establishing the special regime for the sector, notably the part regulating short-term and seasonal labour contracts, may have had an impact on the exercise of trade unions' rights (ILO, 2019, for further details, see also the next paragraph on textiles). Data on the trade union membership and density in agriculture vary depending on the source used. According to data of the Ministry of Labour (see Table 10 in Annex C-1), the number of trade union members in agriculture decreased from 3,871 in 2007 to 2,921 in 2019 and their share in the total number of workers fell from 4.9% to 0.9%. Other sources (including the complaint submitted by the civil society) show an increasing number of unionised workers under the special regime in agriculture (Ley N° 27360) from 8,295 in 2009 to 11,065 in 2016, with the trade union affiliation rate varying: from 4.9% in 2009 down to 3.3% in 2012 and up to 4.6% in 2016 (Queja contra el gobierno peruano, 2017). At the same time, the number of people working in agriculture in Peru increased from 3.97 million in 2008 to 4.08 million in 2017, and the number of those covered by the special regime for agriculture increased from 182,552 in 2008 to 276,403 in 2017 (studies also speak of 333,368) (Maldonado Mujica 2020). The National Federation of Agro-industry Workers (Federación Nacional de Trabajadores Agroindustriales, Fentagro) has criticised amendments to the special regime adopted in 2020 as a missed opportunity to guarantee workers in the sector the right to collective bargaining and freedom of association. Another shortcoming was that an increase in the budget for labour inspection services (SUNAFIL), which would help to enforce and protect workers' rights, was not approved (RPP noticias, December 2020).

In other sectors, mainly in **textile**, the number of workers covered by the non-traditional exporting regime varied between 69,041 and 83,425 in 2010-2016. Some worked for 15 and more years in the sector on consecutive short-term contracts, not providing certainty or stability in personal or professional life. According to the ILO and the Ministry of Labour (Ministerio de Trabajo y Promoción del Empleo, 2019b), such contracts may decrease the possibility to join a trade union and, as a result, trade union operation in these sectors. One of the arguments provided says that in case of fixed-term contracts their renewal depends on the goodwill of employers who may not renew the contract or threaten not to renew it in case of trade union activity. In the case submitted by the Peruvian trade unions on the matter, the ILO Committee on Freedom of Association called on the Government to ensure that the contract regime in non-traditional exports does not interfere with the exercise of trade unions' rights.⁶ However, the number of unionised workers in the non-traditional sector decreased from 7,769 in 2010 to 2,265 in 2016, i.e., from 10% to 3.2% (Queja contra el gobierno peruano, 2017).

⁶ In 2016-2018, there were two proposals to modify the Law on non-traditional exports, however, they did not get the priority in the National Congress. At the same time, the Government considered prolongation of the regime by another 24 years. See: Actualización de la queja contra el gobierno peruano por falta de cumplimiento de sus compromisos laborales y ambientales, contenidos en el Acuerdo Comercial entre Perú y la UE (2018): https://www.fdcl.org/wp-content/uploads/2018/08/REDGE_Actualizacion-QUEJA_FINAL.pdf

As outlined in the main report, the Agreement has triggered an increase in Peruvian exports, output and employment in the chemical sector and sectors covered by special regimes: in agriculture (e.g., in vegetables, fruits, and nuts), food processing, textiles, and apparel. Based on the literature and statistics, one can conclude that the number of trade union members in those sectors and the affiliation rate were affected mostly by macroeconomic developments (similar changes in data related to trade unions can also be observed in mining, construction and manufacturing), as well as by domestic legislation and provisions about short-term contracts under special regimes not offering job stability and potentially discouraging trade union activity for fear of not having a contract renewed. It is to be seen yet if the latest legislative changes of 2019 and 2020 will bring about any changes in this respect. On the other hand, discussions under the TSD Title related to effective implementation of the ILO fundamental conventions, incl. on freedom of association and collective bargaining kept attention of the Parties focused on the need to seek improvements, notably further to civil society complaint. In 2017 and 2020, EU organised workshops in cooperation with Peru on labour conflict management.

4 FREEDOM OF ASSOCIATION IN ECUADOR

4.1 Right to peaceful assembly and association in Ecuador

The freedom of assembly and association are guaranteed by the 2008 Constitution of Ecuador (Art. 66(12)). However, in practice restrictions have been common under the latest Governments. In 2017 pardons were granted to a number of activists who had been charged for their participation in peaceful demonstrations under the previous administration. The 2020 Bertelsmann Foundation country report on Ecuador notes a substantial transformation with respect to these rights that “fostered a climate of open debate” (BTI, 2019). Freedom House reports that strict requirements for starting NGOs have been rescinded but the government retains excessive regulatory power over the actions of NGOs (Freedom House, 2018; Tegantai, 2019). ITUC reports the use of violence by riot police in response to protestors (ITUC, 2019).

Ecuadorian law recognizes the right of workers to organize and bargain collectively, and the right to strike is also guaranteed (Art. 326 of the Constitution of Ecuador). However, the Bertelsmann Foundation and the UN Committee on Economic, Social and Cultural report that there is a concern about the lack of ease in joining trade unions, the lack of data, and there are allegations of intimidation and persecution of people exercising their trade union rights (BTI, 2020; UN Committee for Economic Social and Cultural Rights, 2019). Since 2016, the ITUC Global Rights Index for Ecuador has dropped from 3 (regular violations of rights) to 5 (no guarantee of rights).⁷ Freedom House states that private sector labour unions have the right to strike, although the Labour Code limits public sector strikes. The large number of people working in the informal sector means that only a small proportion of the workforce is unionized (Freedom House, 2019). Instituto Latinoamericano de Investigaciones Sociales notes that the Labour Code of Ecuador recognises unions by individual company only, not branch unions, and requires a minimum of 30 workers from a single employer to form a trade union (Article 443). According to data of the Ministry of Labour, only 2,969 out of 5,853 trade unions were active in 2017 (El Comercio, 2017). According to data provided by the Ministry of Labour, in 2021 the list of registered organisations included 1,610 labour organisations, out of which 63 had been created in the period between November 2019 and November 2021, and 11,456 social organisations, out of which 124 had been created in the same period. In the period from 2012 to 2019, six complaints were submitted to the ILO on freedom of association (ILO country profile, Ecuador). The EU provides technical assistance to Ecuador, under the Sociex+

⁷ ITUC Global Index Reports 2014-2020.

programme, to strengthen institutional capacity in supporting social dialogue and conflict resolution.

4.2 Freedom of association in Ecuador in sectors exporting to the EU

Regarding sectors exporting to the EU, the situation in the **banana** sector has been outlined in the complaint submitted in 2019 by the Trade Union Association of Agricultural, Banana and Rural Workers (ASTAC). The sector provides direct jobs to 200,000 workers and up to 2 million indirect ones. In 2017 and 2018, three Ministerial Decrees introduced special regimes for temporary contracts in the banana sector, agriculture and agro-industry reducing stability of working relations, and worsening conditions for trade union operation and collective bargaining in the sector (Iturralde, 2021).⁸ In a report submitted to the ILO Committee of Experts, the Government argued that Ministerial Decrees referred to temporary jobs which are common in the banana sector and that it had been precisely thanks to those new forms of contractual relations that the situation of temporary workers was regularised. The Government also informed that four collective agreements had been reached in agriculture between June 2019 and June 2020, three of which were in the banana sector. This, according to the Government confirms that the new rules do not impede trade union activity in the sector (CEACR, 2021). On the other hand, according to ASTAC, and in addition to the above, the requirement of having at least 30 workers to establish a trade union at the enterprise level represents a hurdle in the sector where many enterprises are small and owners apply practices to avoid trade union activity (e.g., by dividing enterprises, keeping workers without a social security affiliation, creating own trade unions, using threats, etc.) (ASTAC, 2019). In this context, the Ministry of Labour of Ecuador has shared with the study team a list of 32 worker organisations (associations, trade unions and committees at the enterprise level) in the banana sector bringing together (depending on the organisation) from 15 to 4,104 workers.⁹ Two of those organisations have respectively 15 and 19 members which is below 30, i.e., the number established as the minimum number of members to establish a trade union.

The ILO Committee of Experts reiterated in 2021 a request to the Government to consider with social partners amendments to the Labour Code which would reduce the minimum number of workers able to establish a trade union at the enterprise level and also to allow for establishment of trade unions comprised of workers from several enterprises (CEACR, 2021). The Committee also noted that while the Government of Ecuador agreed for an ILO mission to provide technical assistance to support legislative reforms on freedom of association (CEACR, 2018; 2020), and the mission had taken place in December 2019, including presentation of a roadmap to the tripartite partners with a view to structure their discussion about legislative reforms, there was no information provided by the Government of any follow-up actions or work to finalise and implement the roadmap (CEACR, 2021). According to the Ministry of Labour, in May 2021 a court in the Ecuadorean province of Pichincha ruled that the Ministry of Labour should register ASTAC as a trade union.¹⁰

The **flower** sector provides in total over 78,000 jobs (other sources speak about 105,000 jobs), out of which 50,000 are workers directly employed (51% of them are women). Flower cultivation takes place in the provinces of Pichincha, Cotopaxi, Carchi, Imbabura, and Azuay. Around 21% of production are exported to the EU. There are also 11 Fairtrade

⁸ According to the Government of Ecuador, these decrees and others prepared for a few sectors (e.g. livestock, flower, banana, tourism, manufacturing and others) had not replaced provisions of the Labour Code but aimed at formalising labour contracts and ensuring appropriate working conditions for temporary workers. The Government also stated, in information provided to the evaluation team, that the modalities had been prepared in a tripartite dialogue with employers and workers.

⁹ Many of the organisations have not provided the exact number of members.

¹⁰ The Government's appeal to the provincial court decision was accepted on 09 September 2021 by the Constitutional Court of Ecuador; see http://esacc.corteconstitucional.gob.ec/storage/api/v1/10_DWL_FL/e2NhcNBldGE6J3RyYW1pdGUnLCB1dWlkOicwY2FkYWE1Yy04OTIxLTQzYzQtYjkzNi0yODAxZGFhYThhNTkucGRmJ30= [accessed on 25 October 2021].

plantations employing around 2,200 persons (56% of whom are women) (Fairtrade, Expoflores, 2019). Prior to the Agreement's start of application, around two thirds of plantations were small, of 6 hectares on average. Literature refers to two existing trade unions in the sector at the time, Jardines del Cayambe and FLOREQUISA (FENACLE, 2011). In a study carried out in 2013 in the province of Cotopaxi, 91.2% of workers of the sector declared not to belong to a trade union or another organisation. Regarding the reasons for the low membership rate, 37.4% said they didn't know how to organise, 24.2% spoke about the lack of an organisation to join, 13.1% referred to a prohibition from the enterprise to join an organisation, 5.1% did not have time for such activity and 20.2% provided no response to this question (Martínez Valle, 2013). Employers (producers and exporters of flowers) are represented by Expoflores.

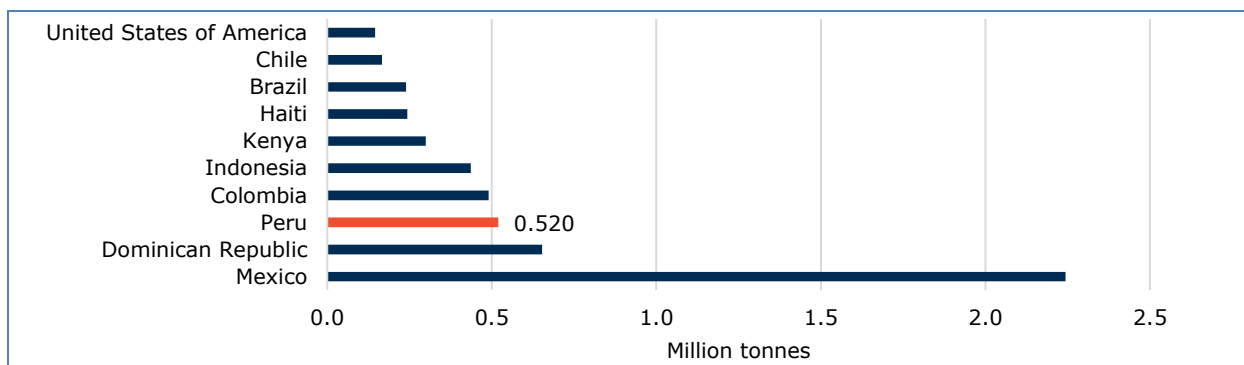
CASE STUDY 9 – THE IMPACT OF THE AGREEMENT ON BIODIVERSITY – THE CASE OF AVOCADO PRODUCTION IN PERU

1 INTRODUCTION

The objective of this case study is to identify the environmental pressures and responses related to Peruvian avocado production and to determine the extent and how the Agreement has led to a change in production towards (sustainable) avocado production.

Production of and trade in avocados is recognised as one of the fastest growing markets in the world, and European avocado consumption is identified as a key driver for this (Sommaruga, and Eldridge, 2021). Peru is one of the world's largest producers of avocados: in 2019, was the third largest one after Mexico and the Dominican Republic (Figure 1).

Figure 1: Total production of avocados by country, 2019



Source: FAO, 2020

Globally, avocado production can put pressure on biodiversity, by e.g., **water** and **agrochemicals** use as well as **land use change**: Regarding water use, studies indicate that avocados are among the top three crops causing water stress (Stoessel et al., 2012). Irrigation systems used for avocado production can extract water from both groundwater and surface water, which can intensify various water related risks. These risks include aquifer depletion and reducing surface water levels in rivers, which can potentially both harm the functioning of ecosystems and negatively affect biodiversity (Verones et al., 2012). In general, avocados are often a mass-scale, monoculture crop, leaving the soil with fewer nutrients and more vulnerable to diseases, creating the need to use more pesticides and fertilisers. The use of agrochemicals is often not limited to the contamination of local soils; agrochemicals also run off into surrounding water bodies and potentially into distant ecosystems. Moreover, over long periods of time, monoculture crops lead to soil depletion, taking away most of its mineral properties. The expansion of avocado production is associated with land use changes and in some countries (e.g., Mexico) with deforestation (WRI, 2020). In these cases, farmers plant young avocado trees beneath forest canopies and eventually cut down shrubs and old trees to provide more sunlight and space for these plants (UNDEP, 2017).

The impact of the Agreement on the environmental pressures and responses related to avocado production in Peru is difficult to assess for multiple reasons; (1) the economic

modelling results¹ by the European Commission did show a significant tariff-induced output change for the 'vegetable, fruits and nuts sector' that includes avocados, indicating that the Agreement may have a positive impact on the production output of the avocado sector in Peru. However, those economic modelling results show the output changes *per sector* based on aggregated tariff changes (as the result of the Agreement) and not *per product*. Thus **no definite conclusions can be made about the economic effects of the Agreement based on the economic modelling results/tariff induced changes**; (2) Non-tariff measures (NTM) are not included in the economic modelling, which makes it difficult to quantify the impact of the Agreement's NTM; (3) external factors, such as changes in the European demand for (sustainable) avocados, independent of the Agreement, can be an important factor to cause changes in Peruvian avocado production; and lastly (4) the Agreement's TSD Title does not incorporate any specific provisions for organic or sustainable avocado production, which makes it hard to establish a link between the Agreement and changes in sustainable avocado production. At the same time, as Peruvian Hass avocados are mainly an export product, it is likely that the Agreement influenced trade between the EU and Peru and further intensified environmental pressures and responses associated with the production of avocados in Peru.

Through the Agreement, the avocado sector in Peru benefits from duty free access to the EU market, compared to a 4% tariff which would be due without the Agreement. It is therefore interesting to study if the Agreement has led to an increase in Peruvian exports of avocados to the EU and an associated increase in production, with potential environmental implications.

In the remainder of this case study, we first provide some brief background information about the current situation and recent trends of avocado production in Peru (section 2). Section 3 provides the methodological model for the analysis, followed by the impact analysis itself (section 4). Section 5 concludes.

2 CURRENT SITUATION AND RECENT TRENDS

2.1 Avocado production regions in Peru

Avocado production in Peru is mainly concentrated in the 2,000 km dry coastal strip from Chiclayo in the north to Arequipa in the south (Figure 1). There are several major growing zones, such as:

- The **Olmos irrigated area** (Department of Lambayeque), with about 38,000 ha irrigated area (CIRAD, 2019). The average annual growth rate equalled 31.2% in this area between 2015-2019 (Peruvian Government, 2019);
- The **Chavimochic irrigated area** (Department of La Libertad), with about 75,000 ha of irrigated production (CIRAD, 2019). La liberated area is the largest area in terms of production, representing 37.7% of the national avocado production in 2019 (Peruvian Government, 2019). The average annual growth rate equals 12% over the last five years (ibid.);
- The **"coastal river valleys" of the Departments of Lima** (especially Barranca, Huaral, Cañete, Chíncha) and Ancash (Casma and Chimbote), with about 10,000-12,000 ha of irrigated production (CIRAD, 2019);
- The **Sierra**, with about 2,000 to 4,000 ha largely unirrigated (the western foothills of the mountain range, mainly in the south of the Departments of Huancavelica, Arequipa, Cuzco, Ayacucho and Ica) (CIRAD, 2019).

¹ The economic modelling results show the output changes per sector based on aggregated tariff changes (as the result of the Agreement) per product between 2012 and 2019. They compare the tariff-induced changes against the hypothetical counterfactual of having no agreement. As such, the economic modelling gives an indication of the Agreement's importance on changes in output for certain sectors.

Figure 1: Map of main avocado production areas, Peru



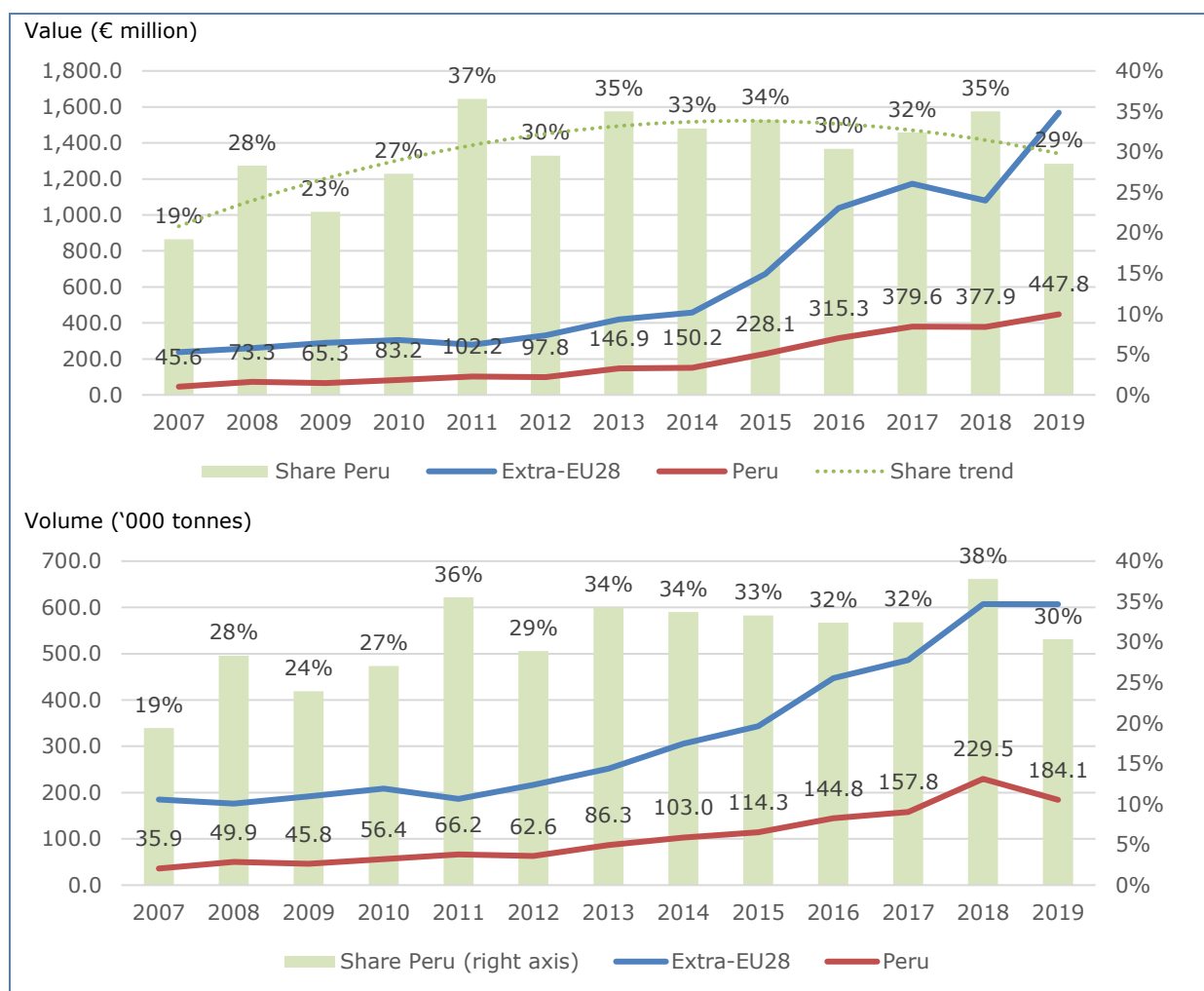
Source: CIRAD (2019)

The first three areas are situated in coastal desert zones and use intensive irrigation, while the highland Sierra production area is largely unirrigated. Rainfall in the coastal production areas is low and irrigation water is sourced from rivers (and in the case of the Olmos, from the River Huancabamba, using a 20km tunnel through the Andes to the Palo Verde dam) (CIRAD, 2019). This case study focusses on large production areas such as the Olmos and Chavimochic areas and the coastal river valleys, including the Ica Valley.

2.2 Performance

Peru's **exports** of avocados to the EU have steadily grown since 2012. In 2019, fruits, led by avocados, became the largest import commodity from Peru to the EU. Between 2012 and 2019, the value of avocado imports increased from EUR 98 million to EUR 448 million (Figure 2). Over the same period, total EU avocado imports have however also rapidly expanded; the share of imports from Peru in total EU avocado imports in fact increased from 19% in 2007 to 37% and 30% in 2011 and 2012, and then remained at levels between 30% and 35% since the start of application of the Agreement; in other words, import growth from Peru was proportional, but not higher than, that of total EU avocado imports. In considering this, it needs to be taken into account that almost all EU imports of avocados are from countries benefitting from preferential access to the EU under FTAs or unilateral preferences (the only notable exception being Brazil, whose share in total EU imports is however limited at about 1.2%).

Figure 2: EU28 imports of avocados (HS 080440) from Peru vs. total, 2007-2019 (€ million)

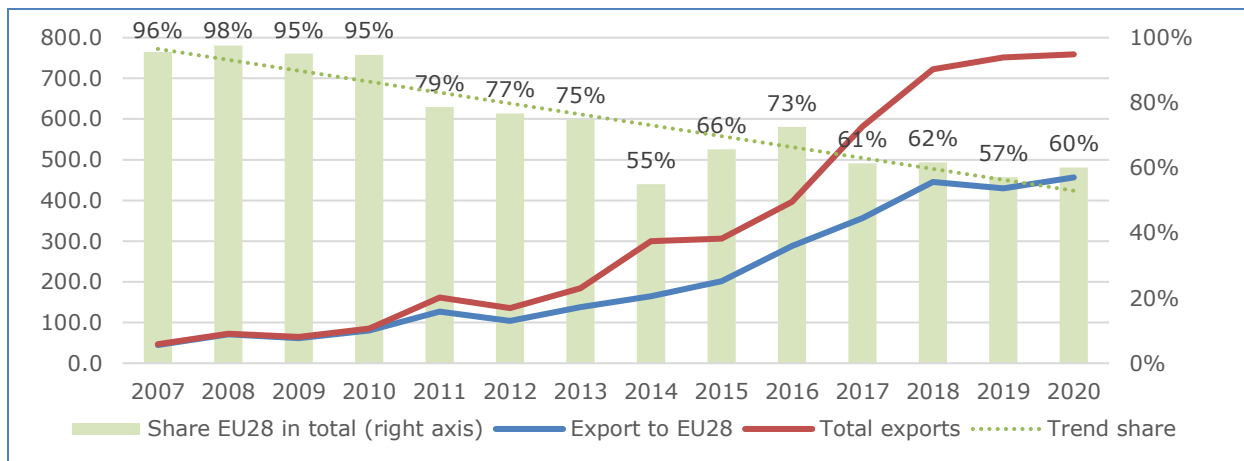


Source: Own calculations based on Eurostat COMEXT.

According to the Commission for the Promotion of Peru for Exports and Tourism (Promperu), Peru is the main supplier of Hass avocado² to Europe. The EU is also the largest market for Peru's avocado exports, accounting for about 60% of the total export value since the Agreement's start of application (Figure 3). At the same time, that share was higher prior to the Agreement, reaching almost 100% in the years 2007 to 2010 before dropping to the current share since about 2014.

² Hass is the most demanded avocado variety in Europe. In 2019, 95% of Hass avocado production was aimed at the international market (CIRAD, 2019).

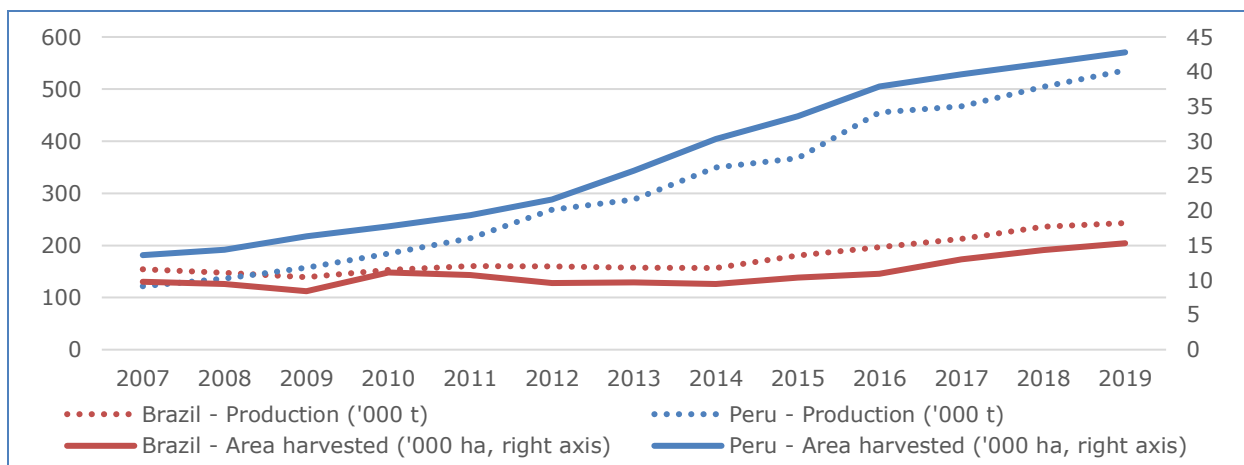
Figure 3: Peru's exports of avocados (HS 080440) to EU28 vs. total, 2007-2019 (USD million)



Source: Own calculations based on Eurostat COMEXT and ITC TradeMap.

Figure 4 compares avocado **production** in Peru with avocado production in the largest avocado producing country exporting to the EU under MFN (Brazil). In Brazil, avocado production largely stagnated between 2007 and 2014, at around 150,000 tonnes per year, but then increased to 243,000 in 2019. In Peru, avocado production increased each year over the period 2007 to 2019, with production growth between 2012 and 2019 averaging around 38,000 tonnes per year, compared to 29,000 for the period 2007-2013; in percentage terms, the average growth rate in the Agreement period was however lower, at 10.4% per year, than in the years before the Agreement (17.1%). The area harvested has grown broadly commensurately with production.

Figure 4: Annual production area and total production of avocados, Peru and Brazil (2007-2019)



Source: FAO, 2020

While the Agreement provides a predictable tariff preference in the EU for Peruvian avocados, the output performance suggests that factors other than the Agreement were the major driver of the growth in avocado production in Peru. Yet, it is also noted that main exporters of avocados to the EU are benefitting from the Agreement; this is confirmed when comparing trends with a country without a preferential agreement like Brazil: Peru experienced a higher growth rate than Brazil, which may be linked to the Agreement.

2.3 Governance

The **National Agrarian Policy** (PNA)³ stipulates the long-term strategy for the agricultural sector and aims to promote the sustainable development of this sector (Peruvian Government, 2016). The PNA includes 12 policy areas including 1) Sustainable Soil and Water Management; 2) Forest and Wildlife Development; 3) Infrastructure and modernization of irrigation. For each topic, the goals and challenges are explored. For instance, for sustainable soil and water management, land degradation is mentioned, because erosion, desertification, and salinisation are identified as environmental challenges by the National Institute of Natural Resources (INRENA). Adequate agricultural water management may restore the soil quality (RVO, 2016).

The Peruvian government has put several policies in place to promote the agro-export sector. Especially, Law N° 27360 - **Law of Agrarian Promotion** (LPA) – played an important role in the Peruvian agro-export boom, e.g. to attract business to Peru's driest areas (LNV, 2021). The law provides incentives such as tax exemptions to exporting agriculture companies (LNV, 2021). The law was enacted in 2000 and has been extended twice. The latest extension (which will last until 2031) was approved by the Congress in 2020 and includes several changes, such as a sectoral minimum wage for employees in the agricultural sector (see section 6.4 of the main report). Enabled by LPA, the private sector became the main engine driving Peru's successful agriculture export growth and diversification strategy (World Bank, 2017).

At national level, the Ministry of Agriculture and Irrigation (MINAGRI) is responsible for the agricultural sector (as shown in Table 1, together with other relevant organisations).

Table 1: Overview of important (public) organisations in relation to agriculture policies and avocado production

Organisation name	Description
MINAGRI	Ministry of Agriculture and Irrigation
INIA	National Institute of Agricultural Innovation
ANA	the National Water Authority
UNALM "La Agraria"	National Agricultural University La Molina
Concytec	National Council of Science, Technology and Technological Innovation
ProHass	Association of producers of Hass avocados
SENASA	The National Agricultural Health Service

Source: Based on RVO (2016)

The National Water Authority (ANA) of the Ministry of Agriculture and Irrigation (MINAGRI) is responsible for managing and monitoring national natural water resources, which includes the issuing of authorisations to water service providers for its use and distribution, as well as for the permits for wastewater discharge and reuse. The **National Water Plan**, embedded in the PNA (PNRH 2015-2035) aims to increase the crop area under **mechanised irrigation** from 2% (33 000 ha) in 2012 to 24% (602 000 ha) by the year 2035 (OECD, 2017).

To export fresh avocado products to the EU, Peruvian exporters, like any other producers, must comply with EU import policies and EU product and safety standards.⁴ These requirements concern e.g., maximum residue levels (MRLs) for pesticides in and on food products, as well as sanitary and phytosanitary (SPS)-related import restrictions. In addition, the EU imposes requirements regarding the size and packaging of avocado

³ Supreme Decree No. 002-2016-MINAGR

⁴ See for more information: <https://www.cbi.eu/market-information/fresh-fruit-vegetables/buyer-requirements>

products. This is further illustrated by widespread use of the **GlobalGAP certification**⁵, the certification scheme most requested by EU clients, in Peruvian avocado production despite the limited size of the plantations (CIRAD, 2019).

According to stakeholders interviewed for the evaluation, it is difficult for small-scale farmers to meet the export criteria set by the EU. Programmes or Social enterprises like Fairtraca⁶ support small farm holders to meet export requirements.

In Peru, the **organic avocado** market is still a niche (FreshFruitPortal, 2021b). However, the Peruvian Government promotes organic avocado production for export (Communication MINCETUR, 2022).

3 THE IMPACT OF THE AGREEMENT ON BIODIVERSITY THROUGH AVOCADO PRODUCTION IN PERU – THE CAUSAL CHAIN

DPSIR framework - The DPSIR (Driver, Pressure, Status, Impact, Response) framework allows to interpret certain environmental indicators by establishing a causal relation between indicators and their analysed effects. The framework is often used in biodiversity analyses and the causal chain developed for this case study applies the logic of the DPSIR framework. As illustrated in Figure 3, the DPSIR framework shows the Status before the implementation of the Agreement in 2011, and in 2020. Below we further introduce the framework in the general context of *global* avocado production, not tailored to the situation in Peru. In the analysis (section **Fehler! Verweisquelle konnte nicht gefunden werden.**), the framework is applied on the biodiversity impacts of Agreement through avocado production in Peru.

1. **DPSIR** – The **Status** describes the factual biodiversity related state in a certain country or area. The state of biodiversity, and changes overtime, are measured by analysing indicators such as the number of species in different threat levels of extinction, as well as the biodiversity habitat index.⁷ **Drivers** contain increased demand for agricultural products, such as avocados and increased human economic activity because of their production. As discussed in the introduction, the related **Pressures** include water constraints, land use conversion, and increased agrochemical use. Avocado production is generally associated with several key environmental **impacts**, including water resource and soil depletion, ultimately resulting in negative biodiversity impacts. **Responses** to these impacts can take the form of regulations related to water and pesticide uses (i.e., sustainable agriculture), or related to technical or efficiency improvements (e.g., in irrigation systems).

The focus in this case study is on the key environmental pressures associated with avocado production. By identifying certain trends in e.g., water scarcity and the expansion of avocado production, certain conclusions are drawn on the biodiversity impact so far and potential future impacts of the FTA through avocado production in Peru. This is reflected in Figure 3 by emphasising the Drivers, Pressures and Responses boxes.

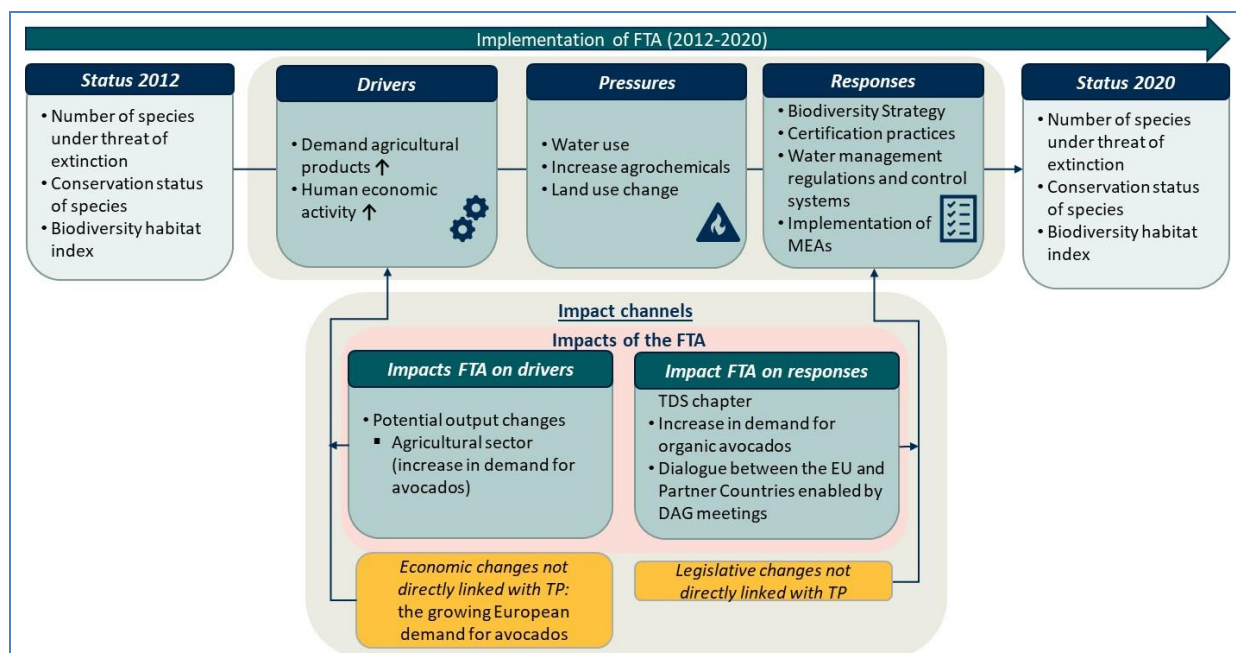
2. **Impact channels** – The middle part of Figure 3 shows the pathways through which the FTA can affect the biodiversity status. It can do so by affecting the drivers (mainly through the economic effects on the FTA) and/or the responses (e.g., by changes in the implementation of environmental legislation, or expansion of certification

⁵ GlobalGAP is an internationally recognized standard for farm production and includes criteria such as food safety, environment (including biodiversity), workers' health, safety and welfare, among others. See https://www.globalgap.org/uk_en/what-we-do/globalg.a.p.-certification/globalg.a.p./

⁶ <https://fairtrasa.com/organic-farmer-dionisio/>

practices). The provisions of the TSD chapter on biodiversity, forestry and in particular the Multilateral Environmental Agreements such as the Rotterdam Convention are identified as the key channel through which the FTA may have affected the responses.

Figure 3: Causal chain and DPSIR for FTA's impact on biodiversity in Peru



3. **FTA induced effects and external effects** – The lower part of the figure emphasises the role of external developments, unrelated to the FTA. It shows that developments unrelated to the FTA can also affect both drivers and responses. It also shows the key challenge in assessing the impacts of the FTA – isolating the FTA-induced impacts from external developments. In the case of avocados, a strong external effect is the growing European demand for avocados (CBI, 2021).

4 ANALYSIS

4.1 Water use in avocado production

In the **Olmos area**, avocado is the number two crop (4,200 ha) grown, after sugar cane (10,900 ha) in 2018. The avocado orchards are owned by large exporting companies, which own areas ranging from 250 to 1,000 ha per company.

The Olmos irrigation project enables the irrigation of 38,000 ha by channelling water from the River Huancabamba – which discharges into the River Amazon – to the dry coastal areas (CIRAD, 2019). The project has not reached its potential as approximately 30% of surface areas remain undeveloped due to water quotas of 10,000 m³/ha set by the National Water Authority (ANA). The undeveloped plots are used to obtain the rights for 4,000 – 5,000 m³/ha of extra water that is required to fuel the micro-irrigation systems, **making water an important limiting factor**. By 2035, the water channelled between the Amazon and Pacific hydrographic region should increase by 50% as envisioned in the National Water Plan (cf. OECD, 2017). However, the plan also discusses the **potential negative environmental effects of water transfer**, including alteration of the ecosystem in the transferring watersheds and the risk of alien aquatic organisms to the recipient regions (OECD, 2017). The Amazon River experiences more frequent, intense, more prolonged and extreme droughts and floods as a result of climate change, which negatively affects river connectivity and aquatic biodiversity migration (Souza et al. 2019). The withdrawal of water for the Olmos irrigation project further intensifies this trend (interview data).

According to the Peruvian government and industry representatives, large agro-exporting companies **invest in highly efficient irrigation practices** to minimise the use of water per hectare of production. At the same time, some interviewed stakeholders stated that extensive water use by those enterprises **lowers the groundwater levels, leading to negative ecological consequences for the Bosque Seco (dry forest) in the North of Peru**. The dry forest is a unique ecosystem with several endemic species (e.g., birds and reptiles), and is a main food source for local communities and their feedstock.

The Chavimochic Special Project is a governmental initiative which aims to transfer and distribute water from the Santa River to irrigate four valleys in the Department of La Libertad (Chao, Virú, Moche, Chicama)⁸, including the desert zones between the valleys (CIRAD, 2019). The Santa River is crucial for agricultural businesses in the area as **it can provide water to the agricultural sector whole year round**, turning desert areas into agriculture productive areas. Large avocado orchards (up to 2,600 ha) – mainly owned by export companies – are located in this area. In total, 75,000 ha irrigated land is available of which avocado production takes around 7,000 ha (9.3%) (CIRAD, 2019).

Crops are produced with pressurised irrigation systems,⁹ using the newest techniques (interview data). Water use varies greatly per farm as avocado cultivation for the export market is still relatively new compared to e.g. asparagus cultivation; farmers cultivating avocados have around 12 years of experience on average, against 25 years of experience of asparagus farmers (Apaza-Tapia, 2020). Due to the irrigation of the Chavimochic area, the Santa River dries up a few times a year, losing its connection to the Pacific Ocean (interview data).

These lower water levels **negatively affect the aquatic ecosystems of the Santa River** as e.g. river shrimp rely on the connection to the Pacific Ocean for reproduction. Note that change in the aquatic ecosystem is not directly linked to the avocado production, as the lower water levels commenced after the completion of the first Chavimochic irrigation project (around 1990), before the large avocado farms settled in this area (interview data). Avocado production *could* exacerbate these pre-existing pressures.

The Chavimochic Special Project and the related expansion of agricultural areas also induced other negative ecological impacts, like **waterlogging¹⁰ and salinization in the lower parts of the valley** (Vos and Marshall, 2017). Salinization lowers the soil production and negatively affects the ecosystems and the biodiversity adjacent to agricultural production areas. The region is currently investing in (costly) drainage systems (interview data).

Climate change is significantly diminishing the Cordillera Blanca glaciers which changes the hydrology of the Santa River (Mark et al., 2010). Climate change also increases the temperature, enabling small farm holders to irrigate (different) crops at higher altitudes and at the same time requiring (more) irrigation for that crop production (interview data). The reduced availability of water during the dry season, forms a threat for water supply in the Chavimochic project region, increasing the competition for water among economic sectors, political jurisdictions and upstream and downstream water users (Lynch, 2011). While the small farm holders (more upstream) the water rights of highland irrigators are defined as a share of available volume, large agribusiness enterprises

⁸ The first part was built between 1986 and 1995 and added 46,000 ha of new irrigated land (Oxford Business Group, 2021). In 2019, three of the four valleys were developed, to cover a total of 75,000 ha of irrigated land (CIRAD, 2019)

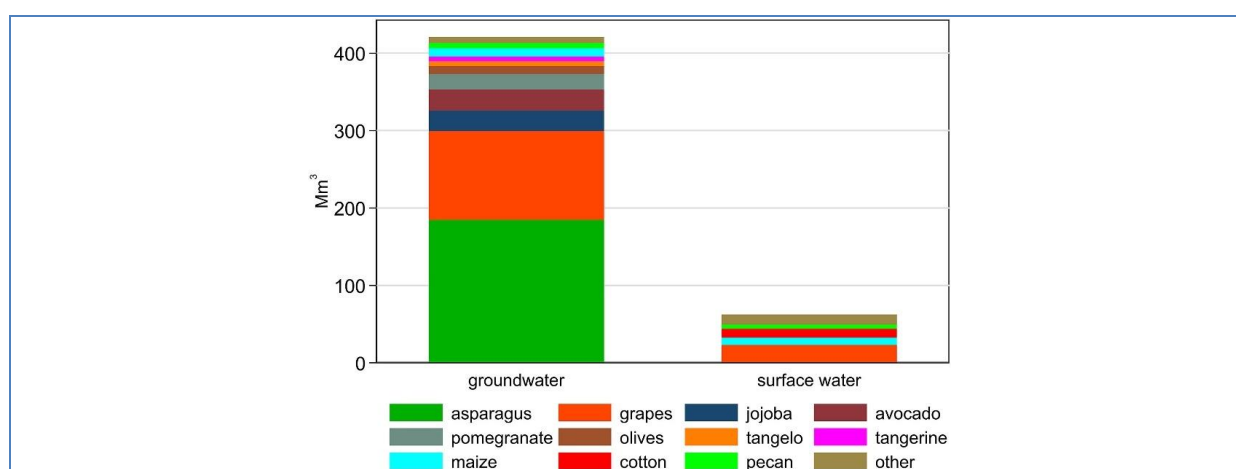
⁹ In pressurized irrigation systems water is precisely applied to the plants under pressure through a system of pipes. Drip irrigation systems and sprinkler systems fall under this type of irrigation.

¹⁰ Waterlogging is the saturation of soil with water, either temporarily or permanently. This occurs when the groundwater levels are too high, which leads to salinization of the soil.

(downstream) are entitled to a fixed yearly allocation of 10,000 m³/ha, leaving small farm holders vulnerable during dry season (Lynch, 2011).

According to ANA, the **Ica Valley aquifer** has been over-exploited. If the current rate of decline in water availability continues, there could be a 76% reduction in the total area irrigated in the valley due to water scarcity within 10 years. This could lead to increased production costs resulting from higher pumping costs (ANA, 2018). Salmoral et al. (2020) estimate that the Water Footprint (WF)¹¹ in the Ica Valley in 2017 was 483 Mm³, with 87% being attributed to groundwater and 13% from surface water. Avocados (28 Mm³) have the third highest water footprint in this area, after asparagus (187 Mm³) and grapes (138 Mm³) (considering both water sources). In fact, **avocados grown in the Ica Valley withdraw water mainly from ground water sources** (see Figure 5), **further depleting the aquifer.**

Figure 5: Allocation of Water Footprint (Mm³) by crop for the year 2017, distinguishing between surface and groundwater sources for the Ica Valley



Source: Salmoral et al. (2020)

Water scarcity in the Ica Valley puts agricultural activities in the valley under serious risk. The economic viability of pumping will also be threatened given the increased costs to abstract water. Economic feasibility studies will be needed to evaluate alternative water sources (e.g. desalination of groundwater) (Aparicio et al., 2019), but given the diversity of farming systems in the valley such initiatives would not be economically feasible for most farmers, particularly for those engaged in small-scale production.

The Agreement-induced impact on water use through its impact on avocado production is estimated **quantitatively**. Based on the data presented in the above analysis, the CGE results and water footprint data from Hoekstra et al. (as discussed in the main report), the additional water resources used in avocado production attributable to the implementation of the Agreement are estimated. Based on the CGE results, the Agreement-induced output change in the *vegetables, fruits and nuts* (VFN) sector equalled 54.8 million USD in 2020. The share of avocados in the VFN sector is calculated based on the value of production within the VFN sector (6%), and the value of avocado exports in the VFN sector (22%). This is combined with the weighted average water footprint of avocado production in the regions Lambayeque (The Olmos area), La Libertad (Chavimochic Special Project), and Ica (Ica Valley aquifer) based on Hoekstra et al (2010).¹² This estimate equals 996 m³ water

¹¹ The water footprint represents the amount of water consumed by a nation or a specific geographical location, by sector, product or company.

¹² Hoekstra et al. (2010) provide estimates of (blue, green and grey) water footprints per crop and region. Based on their estimates, the weighted average of the three main production and exporting areas was calculated. The estimates on the water footprint for avocados are: Ica 1,221 m³, La Libertad 998 m³, Lambayeque 927

per ton of avocado. Based on this approach, it is estimated that the Agreement-induced impact on water use in Peru through avocado production in 2020 was between 4 million m³ and 14 million m³. This corresponds to roughly 1%-3% of water used for avocado production in Peru.

4.2 Agrochemicals use

In the **Northern production regions (Olmos and Chavimochic)**, there is **limited use of pesticides** (interview data). This is possible due to 1) the limited number of 'host plants' for pests in the desert, 2) the climatic conditions (i.e. minimum rainfall), 3) the avocado's natural protection through its thick skin and 4) the large desert area between the Olmos and Chavimochic, preventing the transfer of pests (interview data). In areas where rainfall is more abundant (e.g. the Ica valley), the use of pesticides naturally increases (but still remains relatively low).

Even though the application of pesticides complies with current EU and international pesticide policies, one should be aware that the **use of pesticides can be harmful to insects and reduces the biodiversity in and around the avocado farms** (interview data; Bartl, 2012). Some avocado farms apply 'wind hedges' by planting trees around the production areas. In these trees birds and insects can thrive, but the absolute surface in ha of these wind hedges is low.

In the northern production areas (Olmos and Chavimochic) fertilizer use is higher than in e.g. Sierra region as the desert soil is not very fertile (interview data). Fertilizers are applied via advanced irrigation systems, ensuring their efficient use (interview data).

Export-oriented avocado farms often hold several certifications to meet the demand for certified avocados in foreign markets (Apaza-Tapia, 2020). In the **Chavimochic area**, all avocado and asparagus farms have at least one certification. These certifications (e.g. Rain forest, Tesco and Fair for Life) often include strict criteria to reduce pesticides use (Ibid), which aims to reduce harmful environmental impacts like soil and water contamination. Strict food safety criteria (from e.g. Japan and the EU) imply that no residues are permitted in the destination markets to comply with the indications on labels. (Apaza-Tapia, 2020, p. 97).

4.3 Land use change

The Northern production areas experienced land use change as coastal desert areas were turned into production sites, having a potential negative impact on biodiversity due to dry forest degradation and deforestation. At the same time, the dry forest/desert area is replaced by fruit trees, and this afforestation may increase the net carbon sequestration potential in these areas (Communication MINCETUR, 2021).

The Sierra and the Huaral regions are more traditional production areas and there is no indication that growth in avocado production resulted in land use change (interview data) with evident negative environmental impacts. It is noted that these regions host important species and are rich in agro-biodiversity, which may become at risk if many farmers shift to (monoculture) avocado farming (interview data). In these regions, including the Chavimochic region, certain crops (e.g., asparagus and peppers) are replaced by avocados to respond to the growing foreign demand for avocados. Avocado is a perennial crop and covers permanently the soil, which has environmental benefits compared to annual crops, i.e., permanent soil cover and the lack of tillage reduced e.g., the leaching of nitrogen which benefits soil production, and water and air quality (Bartels, et al. 2012). During an

m³. The weights are based on the hectares of irrigated land per production zone, as listed in section 2 (Ica 11,000 ha, La Libertad 75,000 ha, Lambayeque 38,000 ha).

interview it was mentioned that **avocados are often replaced for annual crops (peppers) which positively impacts the environment.**

5 CONCLUSIONS

The demand for Peruvian avocados has increased over the past years, especially in the EU. The Agreement facilitates the growth in avocado exports through a 4% tariff preference in the EU (compared to MFN tariffs), alongside several (inter)national policies and other promotion measures to support the avocado-export business. It is challenging to isolate the effect of the Agreement from other trends. Even though the lack of detail in CGE data does not allow to identify a one-on-one causal relation between the Agreement and the growth in avocado production in Peru, it is very likely that a proportion of the higher exports is driven to some extent by the Agreement. Applying the shares of avocados in output respectively export value as estimates, between 6% and 22% of the calculated output change of USD 54.8 million in the *vegetables, fruits, and nuts* sector refers to avocados. Considering the context, in which virtually all of Peru's competitors benefit from zero-duty access to the EU market, whereas Peru without the Agreement would have fallen back to MFN treatment upon graduation from the previous GSP+ status, the output increase should however best be interpreted as an avoidance of output contraction that would have been observed in the absence of the Agreement.

The Agreement indirectly intensified the following environmental pressures:

- **Water scarcity and management:** The agricultural sector uses a substantial share of the limited water resources in Peru. In the Olmos region and the Ica valley (dominated by agro-export enterprises) water is identified as a limited factor for the avocado production. The Chavimochic area experiences growing competition for water during the dry season as climate change speeds up the retreat of the glaciers that feed the Santa River. Water stress that is further intensified by avocado production, can lead to different environmental impacts as identified in this study: lower water levels in rivers (Santa River and Amazon River) that negatively affect aquatic ecosystems and the reproduction fish and shrimp species; lower groundwater level degrading the Bosque Seco (dry forest) in the North of Peru; and the over-exploitation of the Ica aquifer. Water scarcity further deepens the vulnerability of small avocado farms as water becomes more expensive and/or large agribusiness enterprises are given priority in water allocation. In the regions in the North (the Olmos and Chavimochic region), water is applied via fast irrigation projects by channelling water from rivers to the production sites. Concerns have been expressed about the environmental negative effects of water transfer, including alteration of the ecosystem in the transferring watersheds and the risk of alien aquatic organisms to the recipient regions. In the Chavimochic region, waterlogging and salinization are identified as risks to the soil and water quality. According to Government and industry representatives, the large agro-export companies invest in highly technical irrigation systems, to reduce the environmental pressures as mentioned above.
- **Agrochemical use & soil quality:** Avocado farms in Peru apply pesticides in compliance with current EU pesticide policies and global certification schemes. The use of pesticides (though limited compared to other crops) may be harmful to e.g. insects and reduce the biodiversity in and around the avocado farms.
- **Land use change:** The Northern production areas experienced land use change as coastal desert areas were turned into productive sites, having a potential negative impact on the biodiversity due to dry forest degradation and deforestation (in the case of Olmos). Yet, the afforestation due to planted fruit trees may have a positive effect on carbon sequestration. In the Sierra and the Huaral regions there has been no indication that growth in avocado production resulted in land use change with evident

negative environmental impacts. In case avocado crops replace annual crops a positive impact on GHG emissions is generated.

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CASE STUDY 10: CLIMATE CHANGE – IMPACTS OF THE AGREEMENT ON LULUCF EMISSIONS IN THE ANDEAN PARTNER COUNTRIES

1 INTRODUCTION

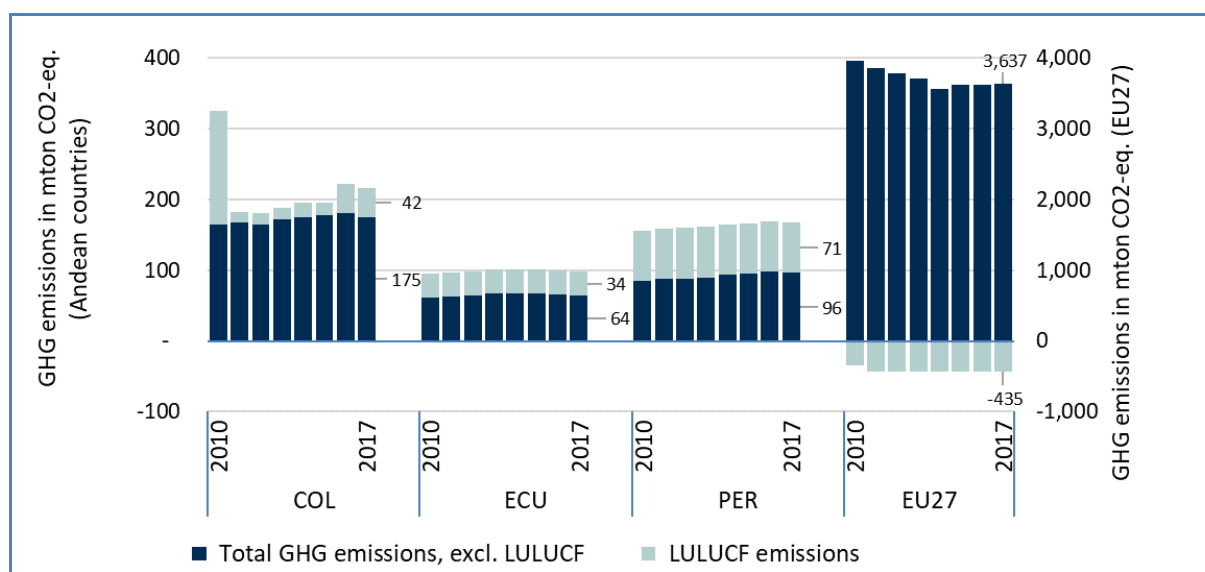
Whereas in many countries gross greenhouse gas (GHG) emissions account for the lion's share of a country's impact on global warming, the LULUCF (land use, land use change and forestry) sector is a key determinant in the Andean partner countries' impact on global warming, given the role of the Amazon as a carbon sink. For that reason, this case study complements the climate change analysis in the general environmental analysis (on gross GHG emissions) in the main report by assessing the Agreement's impact on the LULUCF sector in all partner countries.

We first establish the current situation and recent trends/baseline related to LULUCF in the Andean partner countries (section 2). Section 3 provides the methodological model for the analysis, followed by the impact analysis itself, which consists of a quantitative part (Section 4) and a qualitative one (section 5). Section 6 concludes.

2 BASELINE

Performance - LULUCF activities can result in large amounts of additional GHG emissions, which has been the case in the Andean countries between 2012 and 2020. However, LULUCF activities could also mitigate climate change by the removal of GHGs from the atmosphere and halting the loss of carbon stocks (UNFCCC, n.d.a). Both phenomena are observed in the LULUCF emissions for the signees of the Agreement, as shown in Figure 2: The LULUCF sector of the Andean countries *emitted* GHG emissions to the atmosphere every year. In contrast, the LULUCF sector in the EU *removed* 435 Mt of CO₂eq in 2017. In the Andean countries, Colombia, Ecuador, and Peru, LULUCF emissions account for a very significant share of the total GHG emissions. In 2017, these shares equalled 19%, 35% and 43%.

Figure 2: Gross GHG emissions (excl. LULUCF) and LULUCF emissions in Mt CO₂ eq. (EU27 on secondary axis).



Source: Trinomics, based on CAIT and World Bank

In **Colombia**, an abrupt change is observed in LULUCF emissions in 2011. However, this is driven by a change in methodology rather than an actual decrease in emissions, as reported by the country.¹ Although in 2017 the share of LULUCF emissions in the total GHG emissions was relatively low in Colombia (19%) compared to Ecuador (35%) and Peru (43%), it is noted that LULUCF emissions have risen over the past years (2011-2017) in Colombia. The deforestation and forest degradation in the Amazon has been a major pressure on the local CO₂ sinks. Agriculture (incl. change of land to pastures, illicit crops, livestock), and illegal mining are some of the key drivers of the deforestation and associated LULUCF emissions (IDEAM, 2018). In **Peru**, agriculture including extensive cattle ranching, gold mining, hydroelectric generation, and the exploitation of hydrocarbons (e.g. oil), among others, are the main drivers of a high deforestation rate and thus of the significant GHG emissions (CDP, 2019). In Peru, deforestation occurs in three types of land change: forest land to agricultural land, forest land to grasslands and forest land to settlements (this change in use is related to the expansion of infrastructure, population centres, communication and illegal and informal extractive activities). In **Ecuador**, changes in agricultural land are the main pressure contributing to LULUCF emissions (MAE, 2017b).

Governance - The Andean countries included emission reductions in the LULUCF sector in their Nationally Determined Contributions (NDCs) commitments to the Paris Agreement. **Colombia's** NDCs reaffirm its pledge to reduce deforestation in the Amazon region as a key strategy to reduce emissions. **Peru** in its NDC presented eight measures specifically targeting emissions mitigation of the LULUCF sector including, for instance, promoting conservation, sustainable forest management, reforestation and agroforestry, and assignment of emission rights. **Ecuador's** NDC contained eight lines of actions such as expanding protected areas and strengthening forest monitoring that jointly have the potential to result in sectorial GHG reductions of 4% (16% under the condition of sufficient international support). While these commitments are positive, what will be more important is that each country puts in place the measures needed to meet its target, reports on its progress in a transparent manner consistent with the Paris Rulebook, and sets successive NDCs that constitute the country's highest possible ambition.

In this regard, besides the commitments set in the Paris Agreement, the Andean countries joined the Reducing Emissions from Deforestation and Forest Degradation (**REDD+**) **Programme** aiming to reduce the LULUCF-related emissions. REDD+ is a framework negotiated under the UNFCCC to guide activities in the forest sector to reduce emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks (UNFCCC, n.d.b). In **Colombia**, in the context of REDD+, the Amazon Vision (PVA) and REDD Early Movers (RED) Programmes constitute the basis of payment-for-performance to avoid deforestation in the Colombian Amazon (GGGI, 2018). The Programme rewards emission reductions because of reduced gross deforestation by targeting the beef, dairy, cocoa, rubber, and non-timber sectors and investing the collected funds to further contribute to the efforts to stop deforestation (KfW and GIZ, 2015). In **Peru**, the REDD+ strategy is still under development, led by MINAM and financed by international organizations such as the Moore Foundation and the German bank KfW (MINAM and CIFOR, 2012). In **Ecuador**, the REDD+ Action Plan is framed on the National Climate Change Strategy and guides LULUCF emissions mitigation actions that include sustainable forest management, and transition to sustainable production systems, among others (MAE, 2017a).

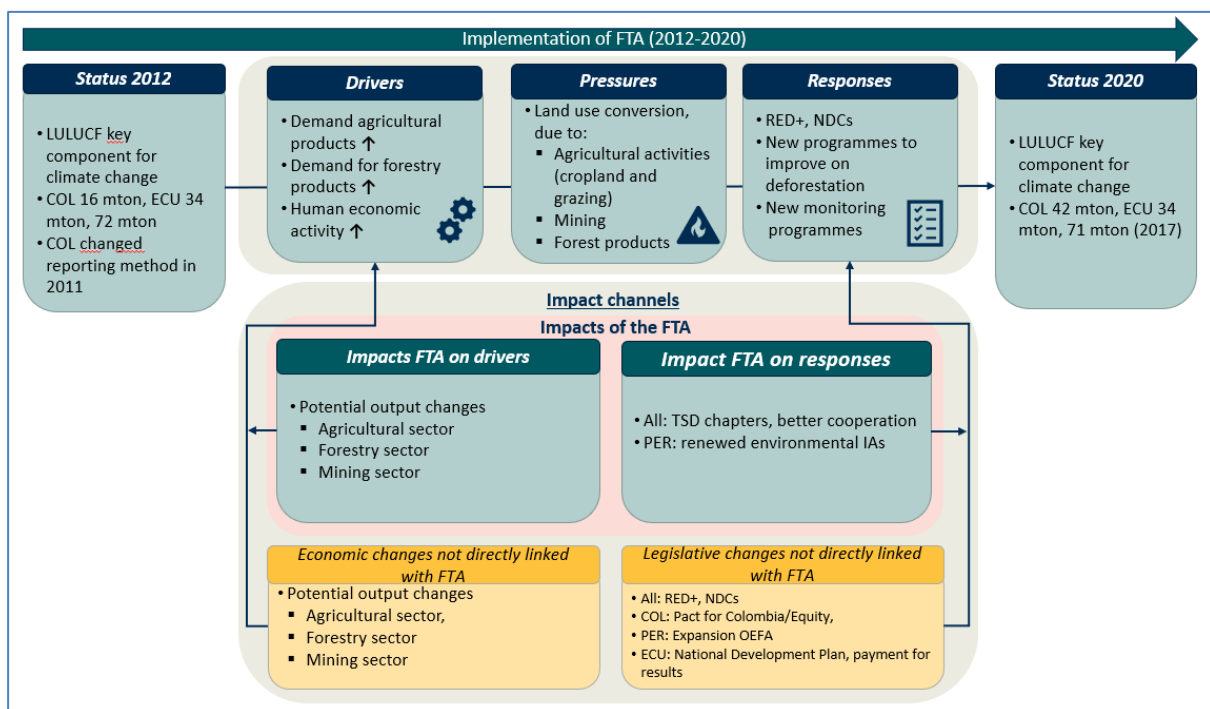
¹ While both inventories are based on IPCC guidelines from 2006, the BUR used tier 1 and 2 guidelines while the Third National Communication is based on tier 2 and 3 guidelines, which include also local emission factors. As a result, emissions in 2010, which is used as base year in Colombia's INDC, are much higher in the Third National Communication when compared to the BUR. See: https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2018-11-01_climate-change_25-2018_country-report-colombia.pdf.

3 THE IMPACT OF THE AGREEMENT ON LULUCF EMISSIONS – THE CAUSAL CHAIN

Figure 3 shows the causal chain that has been developed to transparently analyse the potential impacts of the Andean Agreement on LULUCF emissions in the Andean countries. Three elements are integrated into one figure:

1. **DPSIR framework** - The DPSIR (Driver, Pressure, Status, Impact, Response) framework allows to interpret certain environmental impacts by establishing a causal relation between indicators and their analysed effects. The framework is often used in biodiversity analyses. The causal chain developed for this case study applies the logic of the DPSIR framework, though small deviations were made to make it more targeted. The chain shows the status *before* the implementation of the Agreement and in 2020. In between the two status boxes, drivers, pressures, and responses that are relevant for LULUCF emissions are shown. Drivers – societal developments affecting pressures – include increased demand for agricultural/mining/forestry products and increased human economic activity. Pressures – human activities exerting strain on the environment – include land use conversion and deforestation (mostly driven by agriculture, forestry, and mining). Responses – (policy) actions to address pressure – include the REDD+ programme, the inclusion of LULUCF emissions within the NDCs, and several national policies.

Figure 3: Causal chain and DPSIR for Agreement's impact on LULUCF emissions



2. **Impact channels** – The middle part of Figure 3 shows the pathways through which the Agreement can affect the environmental status. It can do so by affecting the drivers (mainly through the economic effects on the Agreement) and/or the responses (e.g., by changes in the implementation of environmental legislation, or by lowering environmental footprints of products with more strict standards). In the context of the impact of the Andean Agreement on LULUCF emissions in the Andean countries, potential output changes in the agricultural, forestry and mining sectors are identified as the key channels through which the Agreement may affect the drivers of LULUCF emissions. The provisions of the Trade and Sustainable Development (TSD) Title are

identified as the key channel through which the Agreement may have affected the Responses.

3. **Agreement induced effects and external effects** – The lower part of the figure emphasises the role of external developments, unrelated to the Agreement. It shows that developments unrelated to the Agreement can also affect both drivers and responses. It also shows the key challenge in assessing the impacts of the Agreement – isolating the Agreement-induced impacts from external developments.

4 QUANTITATIVE ANALYSIS – BUILDING ON LAND USE CHANGE ANALYSIS

Based on the causal chain developed for this case study (Figure 3), it is concluded that the potential impacts of the Agreement are to be found through the tariff reduction-induced economic changes or through potential Agreement-induced responses. The impact through Agreement-induced economic changes can be estimated quantitatively, building on the economic modelling results (providing tariff reduction-induced output changes) and the quantitative land use change analysis (hereafter: the land use change analysis), which is performed in the overall environmental analysis.

The approach to estimate the impact on LULUCF emissions resulting from tariff reduction-induced economic changes, combines the insights of the land use change analysis and the methodology in Banerjee et al. (2020). The estimated tariff reduction-induced changes in cropland and grazing land are based on the land use change analysis. LULUCF emission intensity data from IPCC is used (like in Banerjee et al.), which includes biophysical data on carbon pools, per type of land use, as shown in Table 1.

Table 1: Carbon density of different types of land use in CO₂/ha

Description	Aboveground biomass	Belowground biomass	Soils	Dead matter	Total
Cropland	50.0	0.0	13.9	0.0	63.9
Grasslands	2.9	4.7	12.0	0.0	19.5
Forest	141.0	52.2	47.1	17.5	257.7
Herbaceous and shrubby vegetation	37.6	15.0	16.0	0.0	68.6

Source: IPCC (2006)

To estimate the LULUCF emissions corresponding to the tariff reduction-induced land use change, assumptions have been made based on the CGE results and observed trends in land use change over the relevant period. Firstly, if the tariff reduction-induced land use change with respect to grazing land was negative, and if the tariff reduction-induced impact on cropland was positive, grazing land was assumed to have been converted into cropland. Secondly, if the tariff reduction-induced increase in cropland area was larger than the decrease in grazing land, it is assumed that the remaining part of cropland was converted from herbaceous and shrubby vegetation into cropland. Thirdly, if the tariff reduction-induced change in both grazing land and cropland was negative, it is assumed that grazing land and cropland were converted into herbaceous and shrubby vegetation.

Based on these assumptions, the LULUCF emission factors (resulting from the net change in LULUCF emissions between different types of land uses) were calculated. Lastly, the estimated tariff reduction-induced changes in cropland and grazing land were then multiplied with the corresponding emission factors to estimate the tariff reduction-induced LULUCF emissions. The results of this analysis are shown in Table 2. It is estimated that LULUCF emissions and removals from the agricultural sector (cropland and grazing land) resulting from tariff reduction-induced economic changes in Colombia, Peru, and Ecuador equal 0.41, -0.05 and -0.04 Mton CO₂ per year respectively in 2020. In Colombia, this corresponds to roughly 0.2% of total GHG emissions. For Peru and Ecuador, it suggests

that the tariff reduction-induced output changes in the agricultural sector did not lead to additional LULUCF emissions.

Table 2: Estimated tariff reduction-induced LULUCF emissions based on land use change analysis and Banerjee et al.

	Conversion	Tariff reduction-induced land use change	LULUCF emissions	Tariff reduction-induced LULUCF emissions
		Hectares (ha)	Ton CO ₂ / ha	Mton CO ₂
COL	Forest - cropland	3,714	193.8	0.72
	Grazing land - cropland	7,052	-44.4	-0.31
	Total			0.41
PER	Cropland - herbaceous/shrubby vegetation	-4,336	4.7	-0.02
	Grazing land - herbaceous/shrubby vegetation	-554	49.1	-0.03
	Total			-0.05
ECU	Cropland - herbaceous/shrubby vegetation	-2,007	4.7	-0.01
	Grazing land - herbaceous/shrubby vegetation	-633	49.1	-0.03
	Total			-0.04

Source: Quantitative land use analysis (Trinomics and IVM), Banerjee et al. (2020) and IPCC (2006).

5 QUALITATIVE ANALYSIS

5.1 Impact on agricultural LULUCF emissions

As explained in the land use change analysis, it is unlikely that the Agreement resulted in increased grazing activities in any of Andean countries. Therefore, it is expected that the potential tariff reduction-induced impacts related to LULUCF emissions are related to the transformation of forest land to cropland, and it is thus the focus of the analysis presented in this section.

In **Colombia**, the agricultural sector is the largest driver of LULUCF emissions. As shown in the economic analysis, bananas and plantains and coffee, remain today at the top of the EU agricultural imports from Colombia; while palm oil and avocados are the agricultural products that showed the largest increases in production between 2012 and 2020 (the production of avocados showed a 1,323% average annual growth over the period 2012 to 2019, see economic analysis in the main report).

Even though the agricultural sector is the largest driver of LULUCF emissions in Colombia, other phenomena, such as poverty, social inequality, the lack of opportunities and armed conflict in the region also contribute to LULUCF emissions (FAO, 2020). Murad and Pearce (2018) provided insights on land use change (between 2000 and 2016) in the Amazon rainforest and the biophysical and socioeconomic factors driving these changes, and concluded that the differences in deforestation rates observed in neighbouring countries within the same region suggest that the causes are complex and related not only to the suitability of the climate and soil for activities such as agriculture and livestock farming, but also to the specific social, economic and political conditions of the region (e.g., internal armed conflicts, violence and insecurity). No single factor driving deforestation and forest degradation was found; rather, different regions within the study area displayed different rates and causes (the main being livestock production and commercial agriculture) (Murad and Pearce, 2018). This variety of factors influencing land use change in Colombia should be kept in mind when assessing the Agreement potential impact on LULUCF emissions.

In line with the economic analysis, the CGE results show a positive impact on output in the horticulture sector, especially for the products in the model sectors *vegetables*, *fruits and nuts (VFN)* and *other crops*. Although it is difficult to single out individual crops responsible for land-use change and corresponding LULUCF emissions in Colombia, some trends can be identified for specific crops. First, in the case of bananas and plantains, the increase in cultivated areas for bananas and plantain production was confirmed by previous research.

Quintero-Gallego (2019) described that after a slight decrease in 2012, plantain cultivated areas in the Quimbaya area increased from 2,178 ha to 4,824 ha in 2016. In total, 7,324 ha were cultivated with plantain in the Quindío region in 2016 (Quintero-Gallego et al., 2018). According to the study, it is highly probable that plantain (along with other products) continued pressuring land covers in the area after 2009 and driving the transformation and degradation of forests -and especially pasturelands- for growing crops as plantain (Ibid.). Secondly, regarding avocados, the area planted with avocados in Colombia increased by 127% between 2012 and 2016 (IDEAM, 2019). In the Quindío region, the cultivated area with avocado plants had tripled between 2007 and 2016, suggesting a probable change in land covers in that region (Quintero-Gallego et al., 2018). As discussed above, these developments are also reflected in the growth rates analysed in the economic analysis. Though it is unclear to what extent the increase of cropland for plantain and bananas and avocados -and associated LULUCF emissions- is directly driven by the Agreement, it is plausible that the Agreement may have influenced the reported crops expansion and thus contributed to an increase of LULUCF emissions.

The CGE results show a slight increase in *crops nec* (that includes, among others, coffee and cocoa beans) from Colombia which may as well have affected LULUCF emissions. Though this CGE estimated increase in *crops nec* cannot be directly linked to the trade of coffee or cocoa beans (as these are both products for which the Agreement does not establish tariff preferences because they have a zero MFN tariff), there is evidence of an increase in the area planted with cocoa and coffee beans in Colombia since the start of application of the Agreement. In fact, the area planted with cocoa is reported to have increased by 89% between 2012 and 2016 (IDEAM, 2019). Yet, the impact of cocoa on land use change and thus LULUCF emissions in Colombia continues to be debated. On the one hand, some authors have shown the potential impact of land use change of cocoa production (Castro-Nunez et al., 2020). On the other, results from correlations and spatially explicit analyses have demonstrated that regardless of its widespread production across Colombia, cocoa has not been an important driver of deforestation between 2005 and 2020 (Ibid.). As such, there is no evident link between the FTA and land use change in Colombia driven by cocoa beans production. Similarly, in the case of coffee, there is no evidence that the FTA has impacted LULUCF emissions of the sector: the Colombian National Centre for Cleaner Production reports that the age of the coffee farms in Colombia permit to conclude that land use change happened more than 20 years ago, and therefore, it is not considered as a current source of LULUCF emissions (CNPML, 2020). In the coming years, however, a combination of factors, particularly climate change, could trigger a new wave of forest clearance, as farmers are forced to shift production to higher altitudes, sometimes encroaching on sensitive montane ecosystems (SEI, 2020). The potential positive impact on the production of and trade in sustainable and organic products (including cocoa and coffee beans) was also raised by stakeholders (see impact-screening Colombia). For instance, the government and its development partners are identifying market opportunities to produce cocoa with zero deforestation in areas prioritized for the peace process. In fact, in 2019 Minambiente ratified its commitment to the global initiative 'Cocoa, Forests and Peace' and endorsed a 10-year action plan to promote Zero Deforestation cocoa production models (Minambiente, 2019a), which has received support from the private sector (Luker Chocolate, n.d.), but also critics due to the lack of a clear roadmap to implement those commitments (Agro Empresario, n.d.).

Besides the products included under the categories *VFN* and *other crops*, the ex-ante Sustainability Impact Assessment (SIA) and other stakeholders previously raised concerns about the increase of palm oil production in Colombia because of the Agreement (TSIA, 2009) (TNI, 2016). During interviews, an international environmental organisation also raised concerns about the potential negative effects on forest degradation due to the lack of incentives for palm oil producers. Yet, according to the CGE results, the tariff reduction-

induced output changes of *oil seeds* and *vegetable oils* is negative, which suggests² that the Agreement led to a decrease in palm oil production in Colombia thus far (or rather a slower growth than would have occurred in the absence of the Agreement) and therefore no additional LULUCF emissions. However, oil palm cultivation in Colombia has expanded 166% in the last 15 years (IDEAM, 2019), which may have resulted in structural changes within the sector and an increase in LULUCF emissions. The flows analysis by the Trase database³ (a supply chain transparency initiative focused on traded agricultural commodities) shows that the EU has been the main importer of palm oil from Colombia between 2013 and 2018. In addition, according to Fedepalma, during the first quarter of 2019, the main export destination of palm oil was the EU (69%), and most of Colombian exports of oil palm products (91%) “benefit from preferential conditions of the different free trade agreements in force” (Fedepalma, 2019), which suggests a causal link between increased palm oil exports (and corresponding impacts, including LULUCF emissions) and trade agreements. The CGE model results confirm this, as total vegetable oil exports are estimated to have increased by 9.8%; but in line with the model simulations this export increase does not come from increased production but a shift from domestic use to exports. Palm oil production is expected to increase by more than 177,000 ha in the 2016-2030 period (IDEAM, 2019). An increasing trend towards good practices and sustainable production of palm oil in Colombia has also be highlighted during the interviews conducted for this study. For example, Solidaridad (2019) showed that the import of sustainable palm oil from Colombia to the EU increased from 23% to 31% between 2014- 2018, and that a growing trend of (ISCC) certified biofuels has been observed (from 7% in 2017 to 26% in 2018).

In **Peru**, the three main LULUCF emission sources are: change in land use from forest lands to agricultural lands, forest management in forest lands remaining forest land (wood/firewood production, and forest fires) and change of forest lands to grasslands (following Peru’s NDC). According to the CGE results, the Agreement triggered output reduction in the meat and dairy, and wood and paper sectors. Taking this into account, the main impact pathway through which the Agreement may have changed LULUCF emissions in Peru is the change in land use from forest lands to agricultural lands.

As shown in the economic analysis, since 2013, EU imports of fruits from Peru have grown fast and fruits became the largest import commodity in 2019 (see main report). This growth included various products (e.g., avocados, berries, grapes, and miscellaneous tropical fruits). The estimated tariff reduction-induced output change in Peru in the *VFN* sector corresponds to roughly 14,000 ha (though the *net* impact on cropland area is negative as production decreases in other sectors outweighed this increase). Some of the crops within the *VFN* sector are historically associated with deforestation, such as banana (e.g., Horgan, 2005; Zambrano et al., 2021). However, the *VFN* sector also includes crops unrelated to deforestation and forest degradation (e.g., potatoes, which account for 25% of total value of production in the sector). Concerns have been expressed regarding asparagus and avocado production in the Ica and Villacurí valley in Peru (see Impact screening- Peru). Based on data limitations, it cannot be concluded if and to what extent asparagus output changes have been caused by the Agreement’s tariff preferences.⁴ Furthermore, Vázquez-Rowe et al. (2016) reported that additional cropland in Peru for green asparagus did not lead to land use change, which suggests a limited impact on LULUCF emissions. Since asparagus is one common air-freighted good (Ritchie et. al, 2020), a higher impact on GHG emissions of asparagus is expected to come from transport than from land use change.

² The oil seeds sector is dominated by palm oil, representing 84% of the value of production. As such, a decrease in output in the oil seeds sector provides a strong indication of a decrease in palm oil production.

³ See Trase- Transparency for Sustainable Economies <https://trase.earth/>

⁴ The share of asparagus in the value of production of the *VFN* sector is only 3%, which suggests that the role of asparagus may be limited.

In addition, the economic modelling results show a slight increase in the output of *cereal grains* other than wheat from Peru, which may as well have contributed to land use change. Prior research suggests that the boom of quinoa has led to the emergence of a 'new geography of quinoa' production in Peru. This has been accompanied by the transformation of farming practices and a trend towards increasing competition for land use (an increase of 264% in the area under quinoa cultivation in Peru has been reported between 1995-2014). This, at the same time, may have led to decreased agrobiodiversity due to land use competition, which is seen in the reduction in crop diversity (Bedoya-Perales et. al, 2018). According to SUNAT, in 2019 25% of the Peruvian quinoa was exported to France, Netherlands, Italy UK and Belgium.

A slight increase in the output of *oil seeds* and *vegetable oils* in Peru was observed from the economic modelling. According to our results, the production of palm oil may have led to a slight increase of deforestation in Peru (around 600 ha). This amount is considered too low to attribute to deforestation within reasonable boundaries of uncertainty; as it could have also been produced in existing oil-palm areas, or on former deforested areas. For the pre-Agreement period, some authors have reported that 72% of new palm oil plantations in the Amazon region had expanded into forested areas, representing 1.3% of the total deforestation for Peru for the years 2000–2010 (Gutiérrez-Vélez et al., 2011). Further, it is important to note that the main destination of the Peruvian palm oil has historically been the domestic market, and this is expected to remain the same (90% of total national production by 2025). However, unlike 2015, when a very low share of exports (<1%) were attributed to small and medium-sized producers, annual exports from this producer's segment are projected to jump from 82 tonnes to 20 000 tonnes by 2025 (Minagri, 2016). As corporate plantations by larger producers have been linked to higher deforestation and forest degradation rates than plantations from small producers (who have traditionally expanded to (previously) degraded or deforested lands (DAR 2015; MINAM, 2016), it is not unlikely that ahead of the expected expansion of smaller producers (after 2015), the export of palm oil was not linked to deforestation and forest degradation in Peru, and thus to the associated LULUCF emissions.

The main way by which the Agreement may be impacting the LULUCF emissions in **Ecuador** is the change of forest land to agricultural land, considering the CGE modelling results that showed an output increase for *cereal grains* and *VFN*. According to the economic analysis, particularly two sectors improved performance since the start of the Agreement: fish preparations and fruits. With regards to fish, in some regions (e.g. Chone) grazing land has been converted into pools to cultivate crustaceans (e.g. shrimps) over the past years (Acción Ecológica, 2020). With regards to fruits, it is estimated that the Agreement resulted in a *net* decrease in cropland areas (considering *all* crops produced).

Stakeholders have raised concerns about the impact of banana production in Ecuador. In a manifesto published in 2020, a group of banana producers in Ecuador denounces the illegal increase of area for banana production in 30,000 hectares between 2018 and 2020 closely driven by Agreement (APROBANEC and others, 2020).

5.2 Impact on LULUCF emissions in the mining sector

As shown in the economic analysis, one of the fastest growing sectors in **Colombia** between 2012 and 2020 were precious minerals (35.2% increase on average per year), in particular gold (see the economic analysis in the main report). The CGE results do not show any tariff reduction-induced impact in the economic output of *minerals*, as these are not affected by the tariff preferences (as imports of minerals are generally duty-free in the EU). Although no conclusion about the causal relation between the Agreement and the mining sector can be drawn from these CGE results, it should be noted that new research has suggested effects on the LULUCF emissions driven by this sector in Colombia. For instance, a remote-sensing analysis showed that alluvial mining (especially gold mining) has severely affected the Pacifico Region in Colombia, causing deforestation and forest

degradation (mainly shrubland, followed by wetlands and grasslands) between (60% of forest loss was associated to alluvial mining and illicit crops) (Anaya J. et al., 2020). The study notes that the deforestation connected to barren land from 2014 to 2017 is likely associated with alluvial gold mining (Ibid). In addition, a recent study showed that LULUCF emissions in the Amazon may be affected by impacts on carbon sink lost because of gold mining activities, as these significantly limit the regrowth of forests, and reduce their ability to accumulate carbon (Kalamandeen, M. et al., 2020). Although there is no evidence to prove the impact of the Agreement on LULUCF emissions caused by the mining sector in Colombia, the Agreement may be related to LULUCF emissions in the mining sector.

In **Peru**, mining belongs to the main drivers of high deforestation rates and thus of the significant LULUCF GHG emissions (CDP, 2019). Even though copper is the most exported product from Peru to the EU, there is no clear evidence that the Agreement caused additional pressures on LULUCF emissions by the mining sector in Peru. However, an accelerated land use change between 2000 and 2017 leading to forest degradation has been driven by the mining sector in areas such as Madre de Dios (one of the regions with highest levels of deforestation in Peru) (Tarazona et al., 2020). Trends like the one observed in Madre de Dios and the favourable environment for private investment created by the Government (only in 2014, 50,000 *legal* mining concessions were granted) (Cáceres, 2020) may suggest a potential increase of LULUCF emissions by the sector driven by the Agreement.

In **Ecuador**, mining is not reported as a contributor of LULUCF GHG emissions (MAE, 2017b). Therefore, it is likely that the Agreement did not have any impact in the LULUCF emissions of mining.

5.3 Responses - mitigating measures and the role of the Agreement

Since the implementation of the Agreement, the Andean countries have worked on some concrete regulatory measures that may have generated (in)direct positive impacts on the reduction of LULUCF emissions. In relation to the Paris Agreement, both Peru and Colombia submitted their revised NDC commitments in 2020, where specific measures targeting LULUCF emissions reductions were included.

In **Colombia**, the National Plan for Development, *Pact for Colombia*, *Pact for Equity* creates the National Council for the Fight Against Deforestation was created, which seeks to combat illegality. This is complemented by the *Artemisa campaign*, which is a permanent strategy that seeks to confront the crime of deforestation that has been affecting the country.

In addition, *Pacto de Leticia por la Amazonia* was signed in 2019, by which Colombia aims to receive financial support of the governments of Norway, Germany, and the United Kingdom to promote low-carbon development for the Amazon region through the better use of land and other natural resources. One of the LULUCF related measures aims to implement a program to strengthen technical capacities for monitoring forest surface and deforestation and forest and soil degradation, including the generation and analysis of satellite images for monitoring the Amazon region (Minambiente, 2019b).

During the stakeholder consultations conducted for this study, the role of the *Guide to export and import timber and non-timber products* in sustainable forest management was highlighted by the Ministry of Environment of Colombia. Though it does not focus on a specific market (i.e., the EU), it helps to trace products while meeting international market standards. On this issue, according to Minambiente, the EU through partnerships such as Budgetary Support or the FLEGT (Forest Environment Governance and Trade initiative) have contributed to the forest governance process and the strengthening of traceability processes.

Peru expanded the number of sectors (including agriculture) that fall under the Environmental Assessment and Enforcement Agency (OEFA) (TSD Sub-committee, 2018, 2019). Besides, according to the MINAM, Peru strengthened its environmental impact assessment system as a reaction to civil society organisations' complaints.⁵ As a result, the National Service of Environmental Certification (SENACE)⁶ allows civil society to have access to the environmental impact assessments of public and private projects. As of March 2021, 257 entries were registered in the agricultural sector (including e.g., environmental plans, impact assessments, etc). In the palm oil sector, for instance, four projects were published in 2013. However, during the interviews conducted for this study, environmental NGOs expressed their concerns on a trend towards more flexible environmental standards and rules that have undermined the environmental regulatory controls in Peru. One example is the Sustaining Technical Reports (ITS) that modify the established procedure of Environmental Impact Studies (EIAs). In response to this claim, the Government of Peru indicated to the authors of this study that environmental standards, including the ITS, have not been weakened and that the EIAs have thus not been affected. According to the Peruvian Government, this instrument is designed solely to allow interventions with *non-significant* environmental impact or that include only technological improvements.

Ecuador implemented several policies to combat deforestation and forest degradation, such as the National Development Plan 2017-2022 and the Action Plan National REDD+ that was issued in 2016. These responses have resulted in a reduction of the deforestation rate in Ecuador. Ecuador has been a beneficiary of "payment for results" by the governments of Norway and Germany, within the framework of the program REM (REDD+ for Early Movers), for an approximate amount of 52 million dollars. Likewise, the Green Climate Fund also granted an incentive within the framework of "payment for results" for 18 million dollars for the forest conservation. National Forest Monitoring System is a system that provides the necessary data to strengthen and measure actions in terms of reducing deforestation.

In addition, Ecuador reported that it is making progress on the implementation of the REDD+ Action Plan, a national policy that will contribute to the goal of zero net deforestation by 2030 (TSD Sub-Committee, 2019). The pact for forests (social pact for the production and consumption of legal and sustainable managed forest) includes the objectives strengthening forest certification. The fact that the progress on achieving the zero-deforestation goal has been a persistent subject of discussion in previous TSD Subcommittee meetings shows the interest of the EU in helping Ecuador to accomplish the goals set. During the interviews, the Ministry of Ecuador highlighted the importance that the cooperation with the EU had for enhancing the national commitments.

Based on literature review and stakeholder interaction, it is found that the role of the Agreement, or more specifically the TSD chapter, with regards to these developments seems to be very limited. Though the TSD chapter created a new platform for dialogue and cooperation, only one of the above-mentioned initiatives seems to be pushed by TSD related programmes or dialogues: the improved Peruvian environmental impact assessment framework. Notwithstanding the significance of environmental impact assessments on the long term, it seems unlikely that the Agreement has contributed to positive LULUCF related impacts through this measure so far.

⁵ In 2017, civil society organisations issued a complaint to the EU, expressing their concerns about Peru's lack of compliance with its trade and sustainable development commitments.

⁶ <https://www.senace.gob.pe/nosotros/sobre-senace/>

6 CONCLUSION

Over the period of the Agreement, LULUCF emissions accounted for a considerable share of the total GHG emissions in the Andean countries. In this case study, complemented by inputs from other sections of this study, the causal link between developments in LULUCF emissions and the Agreement is explored, focussing on impacts related to tariff reduction-induced economic changes (building on the CGE results) and tariff reduction-induced regulatory changes. It is concluded that:

- For **Colombia**, it is estimated that the tariff reduction-induced economic changes in the agricultural sector contributed to an *increase* in LULUCF emissions in Colombia of about 0.4 Mton CO₂ in 2020, which corresponds to about 0.2% of total GHG emissions in Colombia. In particular, the palm oil industry may have influenced this result. The CGE modelling results show an increase in exports to the EU of palm oil due to shift from domestic use to exports. Furthermore, Fedepalma (2019) concludes that 91% of palm oil benefitted from preferential conditions of *different* trade agreements. Future analysis on the impact of the projected expansion of palm oil cultivation in Colombia will be required to establish a clear link between LULUCF emissions related to palm oil and the Agreement. Given the tariff reduction-induced increase in the *vegetables, fruits and nuts* sector, as well as the sharp increase in avocado exports to the EU, it may be the case that avocado cultivation has contributed to the increased LULUCF emissions, though causality cannot be proven given data limitations. Given the relatively low share of avocados in the total value of production of the *vegetables, fruits and nuts* sector, it is likely that most of the increase the LULUCF emissions is driven by other crops.
- In **Peru**, it is estimated that the tariff reduction-induced economic changes contributed to a net *decrease* in LULUCF emissions in Peru of about 0.05 Mton CO₂ in 2020 (which corresponds to less than 0.1% of annual LULUCF emissions). This can be explained by the estimated net decrease in cropland and grazing land. Given the estimated tariff reduction-induced increases in cropland for *vegetables, fruits and nuts* and *oil seeds*, production growth of crops within this sector (such as bananas, avocados, and asparagus) may have resulted in gross additional LULUCF emissions. Yet, Vázquez-Rowe et al. (2016) reported that additional cropland in Peru for green asparagus did not lead to land use change, which suggests a limited impact on LULUCF emissions.
- In **Ecuador**, it is estimated that the tariff reduction-induced economic changes contributed to a *decrease* in LULUCF emissions in Colombia of about 0.04 Mton CO₂ in 2020 (which corresponds to less than 0.2% of annual LULUCF emissions). This can be explained by the net decrease in cropland and grazing land.

With respect to LULUCF emissions related to mining activities, the results suggest that there may be an increase of the LULUCF emissions of the mining sector driven by the Agreement in Colombia and Peru; however, the CGE modelling results do not allow to establish a causal link for this sector.

With respect to the Agreement's impact on LULUCF emissions through provisions of the TSD chapter, it is concluded that all Andean countries have started to implement measures to address the negative impacts on climate change caused by LULUCF emissions. Even though the Agreement is likely to open doors for improved cooperation between the EU and the Andean countries, the Agreement does not seem to have resulted in direct positive impacts in the LULUCF sector so far.

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