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OF ECONOMICS AND
POLITICAL SCIENCE ■

Sustainability Impact Assessment in Support of Negotiations with Partner Countries in Eastern and Southern Africa in view of Deepening the Existing Interim Economic Partnership Agreement

SIA Report on Intellectual Property Rights • May 2021



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Abbreviations

ARIPO	African Regional Intellectual Property Organization
CARIFORUM	Caribbean Forum of African, Caribbean and Pacific States
CBD	Convention on Biological Diversity
CETA	Comprehensive Economic and Trade Agreement
DESTA	Design of Trade Agreements database
EPA	Economic Partnership Agreement
ESA	Eastern and Southern Africa
EU	European Union
FTA	Free trade agreement
GI	Geographical indication
IP	Intellectual property
IT	Information technology
IPR	Intellectual property rights
IPRI	International Property Rights Index
OMAPI	Organisation of the Malagasy Industrial Property Office
OAPI	Organisation Africaine de la Propriété Intellectuelle
OMDA	Office Malgache des Droits d'Auteurs
PCT	Patent Cooperation Treaty
PTA	Preferential trade agreement
PVR	Plant variety rights
R&D	Research and development
SADC	Southern African Development Community
SIA	Sustainability Impact Assessment
SPC	Supplementary protection certificate
TRIPS	Trade-Related Intellectual Property Rights
TSD	Trade and sustainable development
UPOV	International Convention for the Protection of New Varieties of Plants
WIPO	World Intellectual Property Rights Organization
WTO	World Trade Organization

Executive summary

The protection of intellectual property rights (IPR) is highly important to businesses across different sectors of the economy. Exchanges of knowledge and technologies are facilitated by guaranteeing that foreign intellectual property (IP) rightsholders will be treated fairly, and their IPRs will be respected. Except for Comoros, all Eastern and Southern African (ESA) countries have legislation to protect common and internationally well-established IP rights. At the same time, IPR enforcement is reported weak for all ESA countries due to a lack of institutional and human resource capacities.

The “Rendez-vous clause” in the interim Economic Partnership Agreement (EPA) foresees the inclusion of IP protection in a more comprehensive EPA. Generally, going beyond generic provisions on Trade-Related Intellectual Property Rights (TRIPS) principles, deeper IPR disciplines would facilitate domestic and international business operations, including licensing, product launches and technology transfer. The European Union (EU) should generally aim to achieve deeper integration in the region in the field of IPRs. EU negotiators should aim for further harmonisation of IP laws and regulations. Areas of cooperation should include the regional management and enforcement of existing national IP laws and creating and managing additional IPRs.

The EU should include key IP provisions in the agreement, i.e. commitment to TRIPS principles, and aim to promote regional legal harmonisation. A future EU-ESA EPA should also aim to accentuate cooperation in the fight against counterfeit products, ensuring appropriate controls at ESA borders to fight counterfeit goods and illicit trade.

EU development cooperation funds should be devoted to capacity building in responsible IP authorities and national customs authorities. Development cooperation initiatives on IPRs should involve IP-centric international organisations such as the World Intellectual Property Rights Organization (WIPO), the African Regional Intellectual Property Organization (ARIPO) and the Organisation Africaine de la Propriété Intellectuelle (OAPI), which would contribute to the accumulation of specific knowledge and the creation of an IP level playing field across African countries. These capacity-building efforts could include environmental issues related to IPR, such as implementing the Nagoya Protocol under the Convention on Biological Diversity.

1. Introduction

1.1 The study

This report is part of the project to prepare a *Sustainability Impact Assessment (SIA) in support of negotiations with partner countries in ESA in view of deepening the existing interim EPA*. Under this project, a brief evaluation of the existing interim EPA has been prepared. The study is also developing a series of SIA reports for the deepening of the EPA. In particular, **this report presents an assessment of potential provisions for Intellectual Property Rights**. The report builds on the analysis in the (draft) ex-post evaluation, which included an assessment of economic and environmental, social, gender and human rights impacts of the interim EPA.¹

The Sustainability Impact Assessment for the deepening of the EPA includes this report on Intellectual Property Rights as well as five other thematic reports, covering the following topics:

- Trade in Goods, Agriculture and Fisheries
- Trade and Sustainable Development (TSD)
- Trade in Services, Digital Trade and Investment
- Public procurement and competition
- Dispute avoidance and settlement and Institutional structure

Each of these reports will also include an assessment of environmental, social, gender and human rights impacts, proportionate to the expected importance of the impacts for each area of negotiation.

This thematic report analyses potential economic, social, human rights and environmental impacts of the EU-Eastern and Southern Africa (ESA5) EPA deepening negotiations. The assessment of this report focuses on impacts from provisions protecting various types of IPRs.

1.2 Context

In 2007, six countries of the ESA region – Comoros, Madagascar, Mauritius, Seychelles, Zambia and Zimbabwe – concluded an interim EPA with the EU. In 2009, four of these countries (Madagascar, Mauritius, Seychelles and Zimbabwe) signed the agreement, and it has been provisionally applied in these countries since May 2012. Comoros signed the agreement in July 2017 and ratified it in January 2019. The interim EPA includes a “Rendez-vous clause” (Article 53), by which the Parties ‘agree to continue negotiations... with a view to concluding a full and comprehensive EPA’. The Article includes trade, environment and sustainable development and other policy areas for further negotiation. The interim EPA also includes a Rendez-vous clause for negotiating IPRs, with a view to concluding a full and comprehensive EPA.

The EU and ESA5 partners launched negotiations for the deepening of the currently implemented EPA in October 2019.² After that, four rounds of negotiations took place in January 2020, July 2020, November 2020 and the fourth one in April 2021. IPRs have been left unaddressed in recent negotiations, including round four, which constitutes the latest rounds of EU-EAS EPA negotiations. For a brief overview of the five ESA countries, please see Appendix I and the Ex-Post Evaluation within this SIA of 18 January 2021.

¹ See https://trade.ec.europa.eu/doclib/docs/2021/march/tradoc_159467.pdf

² See: https://ec.europa.eu/commission/presscorner/detail/en/IP_19_5951

1.3 Methodology

The report begins with an outline of the rationale of IPRs followed by a discussion of the state of IPR protection in the EU and ESA countries (Section 2 and Section 3), including the coverage of IPRs in EU and ESA preferential trade agreements (PTAs). Contrary to other policy areas, the analytical work for this report involves is not based on a screening of potential IPR provisions as such provisions have not been set out in the latest textual proposals. Accordingly, in the impact assessment, we focus on the extent to which different types of major types of IPRs could be covered in a future EU-ESA EPA.

The economic impact analysis of specific types of common IPRs aims to identify areas where economic impacts are likely to be significant for ESA countries and areas where the economic impacts can be considered minor (Section 0).

The economic impact analysis is used as a basis for an impact assessment of environmental, social, gender and human rights impacts (Section 5) that are likely to emanate from the economic impacts. This social analysis follows the same methodological steps as the economic analysis described above, including an analysis of horizontal issues (e.g. gender) where relevant.

The findings of the economic and social impact assessments are used to develop a set of proposals for policy recommendations and flanking measures, which are outlined in Section 6.

Desk research and analysis has provided the main source of information for this report. Although interviews have been carried out in the ESA countries, interviewees did not have a strong awareness of IPR policies regarding the negotiations on deepening the EPA. Also, stakeholders did not have specific comments on the potential impacts of IPR provisions that may be negotiated under the deepening process.

2. Intellectual property rights: rationale and legislation

2.1 Overall rationale of intellectual property rights

IPRs are widely recognised for stimulating innovation and economic activity, particularly in knowledge-intensive industries. IPRs motivate individuals and businesses to invest time, human and financial resources in new scientific or creative discoveries (e.g. new drugs or vaccines to fight COVID-19, new digital technologies), innovations (e.g. electric cars, more fuel-efficient aeroplanes, stronger composite building materials) and other immaterial creations (e.g. songs, designs). IPRs give individuals and businesses the right to recoup the investments made, increasing the potential financial return and reducing investor risk. Without IPRs, fewer innovation risks would be taken, undermining the overall innovative capacity of economies.

Accordingly, IPRs are a regulatory tool used by governments and the EU to create incentives for individuals and businesses to take commercial risks and focus investments and research and development (R&D) on issues that could contribute to societal needs (e.g. the invention of new paediatric medicines or orphan drugs). IPRs are internationally recognised for driving up levels of private sector investment and developing innovative capacities across economies, e.g. investments in education and technological skills. In doing so, IPRs contribute to structural economic change and the modernisation of economies while facilitating international trade. The economic impacts of IPRs are generally amplified by specialisation, global production fragmentation and scale economies.

It should be noted that IP protection is inherently the result of a trade-off between incentives for innovation and creative endeavour, on the one hand, and both economic efficiency and distribution of income, on the other. Intellectual property favours the former at the latter's expense, and an enlightened policy would strike a balance between these opposing objectives.

2.2 IP standards in the EU

IPRs give creators, e.g. artists or businesses conducting R&D, a temporary exclusive right over the commercial use of intellectual creation. An intellectual creation can be a text, a brand, a movie, a design, a medicine, a new plant variety, a new drug, a new technology, but also traditional food or an innovative new production process. IPRs allow rightsholders to decide how, when and where their creations are commercially used and/or exploited.

In EU legislation IPR refers to intangible property resulting from creations of the mind, which falls into two general categories:

- 1) industrial property, such as patents on new inventions, trademarks, designs and models, as well as service brands and protected designations of origin, and
- 2) copyright and related rights, such as music, literature, paintings and sculptures.

2.3 TRIPS and additional international commitments

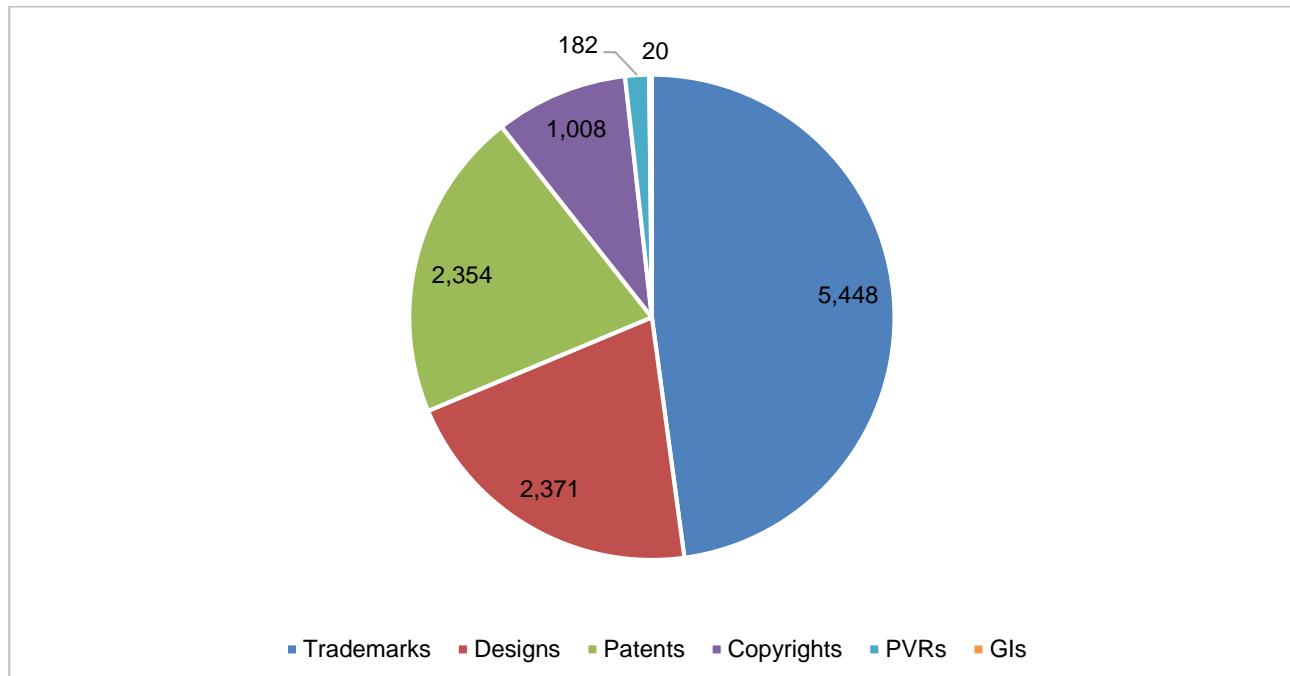
Certain minimum standards for IPRs are agreed upon by the World Trade Organization (WTO) members and stipulated in the TRIPS Agreement. The standards of IPR covered by TRIPS are copyright and related rights (i.e. the rights of performers, producers of sound recordings and broadcasting organisations); trademarks including service marks; geographical indications including appellations of origin; industrial designs; patents including the protection of new varieties of plants; the layout-designs of integrated circuits; and undisclosed information including trade secrets and test data.³

On top of these commitments, many governments added additional protections for various types of intellectual property (so-called TRIPS+ provisions) to protect inventors in their countries. These include trademarks, industrial designs, patents and patent term extensions, supplementary protection certificates (SPCs), copyrights, geographical indications, plant variety rights (PVRs), regulatory data protection, domain names, traditional knowledge and genetic resource rights, encrypted program-carrying satellite signals, semiconductor rights, and undisclosed information rights.

Figure 1 outlines the main types of IP ranked in order of economic relevance for the EU (in terms of contribution to gross domestic product (GDP) of IPR-intensive industries). The numbers demonstrate that industries that use trademarks, designs, patents and copyrights contribute most to economic activity in the EU, while PVRs and geographical indications (Gis) play a lesser role.

³ See WTO overview of the TRIPS agreement, https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm [accessed 19 May 2020]

Figure 1: Major categories of IPR in the EU, ranked in order of economic relevance measured by contribution to EU GDP



Source: Eurostat. GIs: geographical indications. PVRs: plant variety rights. The following sectors are classified as IPR-intensive: pharmaceuticals, scientific R&D, IT, electronics, electrical equipment, motor vehicles, machinery, architecture & engineering, transport, chemicals and telecommunications.

While ESA countries do not commit to TRIPS+ provisions, Comoros, Madagascar, Mauritius, Seychelles and Zimbabwe are contracting parties of the Paris Convention for the Protection of Industrial Property (the Paris Convention), which applies to industrial property in the broadest sense, including patents, trademarks, industrial designs, utility models, service marks, trade names, geographical indications. In addition, Comoros, Madagascar, Seychelles and Zimbabwe joined the Patent Cooperation Treaty (PCT), which provides a unified procedure for filing patent applications in each of its contracting parties. Mauritius and Zimbabwe are members of the ARIPO, while Comoros is a member of the OAPI.

2.4 IPR provisions in EU trade agreements

EU's bilateral trade policy network covers 77 partner countries via 45 (regional) free trade agreements (FTAs) that have been applied.⁴ In these agreements, the EU IPR commitments generally go beyond TRIPS provisions, providing a higher degree of protection across different types of IP. The EU, like the US, Switzerland and Japan, include TRIPS+ provisions in the FTAs. Some of the main TRIPS+ provisions are copyrights, domain names, encrypted program-carrying satellite signals, GIs, industrial designs, new plant varieties, patents (and patent term extensions), semiconductors, trademarks, traditional knowledge, regulatory data protection, genetic resources, and undisclosed information.⁵

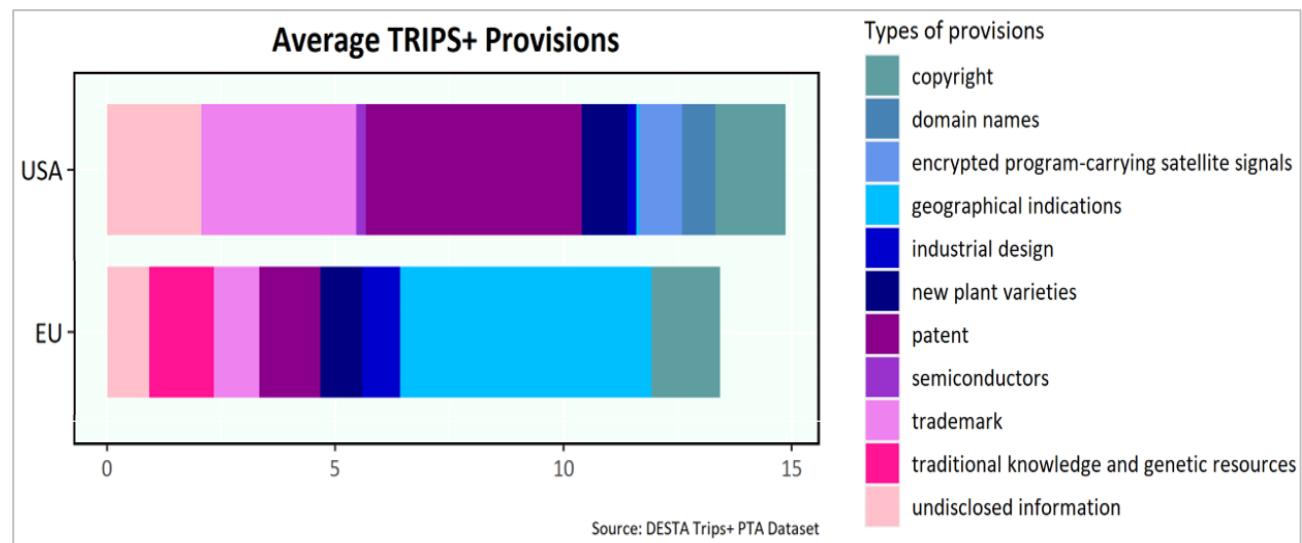
⁴ See DG Trade website "EU trade agreements: delivering for Europe's business", November 2020, <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2211> [accessed 12 November 2020].

⁵ Copyrights and trademarks matter for sectors like information technology (IT) (mainly software and database), publishing, music, and the music, radio and television industry. Geographical indications and new plant varieties are important for the agricultural sector. Domain names and encrypted program-carrying satellite signals are important for the IT industry. Industrial design is relevant for the motor vehicles sector, the machinery industry, electronics, and electrical equipment. Patents (and patent-term extension) are important for the pharmaceutical industry, machinery and agri-chemical sectors (e.g. plant protection), as well as for motor vehicles. Regulatory Data Protection and Supplementary Protection Certificates matter for agri-chemicals, pharmaceuticals, and the plant breeding industry..

According to the Design of Trade Agreements (DESTA) database (comparing all former and active FTAs globally), EU FTAs are particularly strong on GIs. As shown in Figure 2, the EU has created a strong network of countries that recognise and uphold provisions for GIs (for different lists of products, though), despite strong political resistance to GI provisions in the US.

EU FTAs also include significant provisions on traditional knowledge and genetic resources in agreements with developing countries and emerging market economies (e.g. Colombia/Peru, Vietnam, Ukraine, Caribbean Forum of African, Caribbean and Pacific States (CARIFORUM) countries). EU FTAs demonstrate flexibility in the use of TRIPS+ provisions, depending on the trading partner, unlike the more homogeneous US FTA TRIPS+ provisions. By contrast, for trademarks and patents, the EU did not copy the equivalents of EU law into its FTAs, even for developed country trade partners. Compared to US trade agreements, there is much less focus on patents and trademarks in EU FTAs.

Figure 2: Types of TRIPS+ provisions in EU and US FTAs

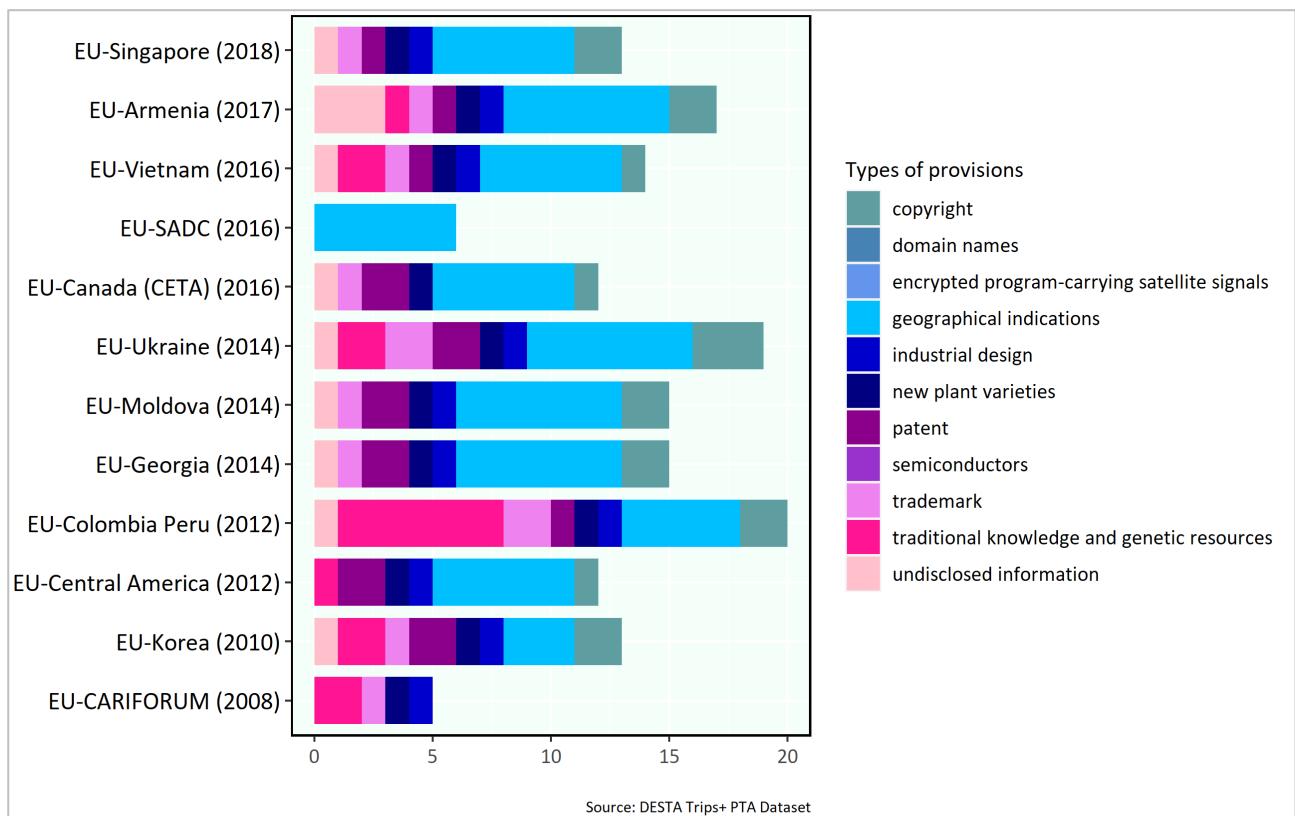


Source: DESTA (2020)

According to the DESTA dataset, most EU FTAs include one or more provisions on either copyright, trademarks, patents or geographical indications. Figure 3 shows the number of provisions in EU FTAs (since 2008) going beyond the minimum standards of the TRIPS Agreement, differentiated by the type of provision. The EU emphasises geographical indications (there are about six GI-related TRIPS+ provisions per EU FTA). For some FTAs with developing economies (e.g. Colombia, Peru, CARIFORUM, Vietnam), traditional knowledge and genetic resources – IP is also incorporated. Across the board, only a limited number of copyright and patent provisions are included, and the number of patent provisions has decreased in the later FTAs.⁶

⁶ Compared to the EU, DESTA data indicate that US FTAs are to be more concentrated on specific IP rights, especially since 2004. Except for NAFTA, US FTAs have no focus on GIs, but cover a wider range of additional types of IPRs, especially in the area of domain names and encrypted programs. Also, US FTAs are much more comprehensive particularly in the area of trademarks and patents.

Figure 3: TRIPS+ provisions in EU FTAs



Source: DESTA (2020)

Covering several developing countries, the CARIFORUM-EU EPA might provide initial guidance for EU-ESA negotiations, recognising the current state of economic and institutional development of Comoros, Madagascar and Zimbabwe.⁷ The EU-CARIFORUM EPA contains an extensive chapter on IPRs, aiming to promote innovation and technological development. It obliges the parties to abide by existing international IP conventions and provides extended cooperation among the parties to facilitate technology transfer and technical innovations. IP provisions tend to go beyond what is provided by the TRIPs agreement, and the provisions are more specific. There is an extensive chapter on protecting GIs and preserving genetic resources, traditional knowledge, and folklore. The Convention on biological diversity is also mentioned in this regard. At the same time, there is no recognised protection for genetic and traditional resources (see also Section 5). The parties merely agreed to “working towards the development of internationally agreed sui generis models for the legal protection of traditional knowledge”. Furthermore, there is no provision for sharing profits arising from the exploitation of genetic resources, traditional knowledge, and folklore by patent holders. Like most other subjects, the EPA encourages regional harmonisation of IP rules and “further progress towards regional management and enforcement of national intellectual property rights”.⁸

⁷ The EU-Colombia/Peru Agreement also covers IPRs.

⁸ Ecorys (2014). Ex-post evaluation of the EPA between the EU and its Member States and the CARIFORUM Member States. Available at https://trade.ec.europa.eu/doclib/docs/2019/july/tradoc_158300.pdf.

The EU-CARIFORUM EPA includes the following provisions:⁹

- Commitment to the TRIPS Agreement (art. 139),
- Exceptions for least developed countries (art. 140),
- Project of regional integration and harmonisation (art. 141),
- Prevention of control licensing practices or conditions on intellectual property rights which may adversely affect the international transfer of technology and that constitute an abuse of intellectual property rights (art. 142),
- Copyright: Cooperative compliance with WIPO (art. 143),
- Trademarks: common registration system (art. 144),
- Geographical indication: protection system in each territory (art. 145),
- Industrial designs: Compliance with the 1999 Hague Agreement on Industrial designs (art. 146);
- Patents: compliance with 1970 Washington Patent cooperation Treaty, 2000 Geneva Patent Law Treaty and 1977 Budapest Treaty on patent recognition (art. 147),
- Utility models, plant varieties and genetic resources (art. 148, 149 and 150); Effective, proportioned and dissuasive enforcement (art. 151 to 163).

2.5 IPR provisions in ESA countries' trade agreements

Madagascar, Mauritius, Seychelles, and Zimbabwe are members of the WTO and therefore TRIPS signatories. According to the DESTA database, only two of seven (recorded) ESA preferential trade agreements vaguely cover IPRs. The 2009 EU-ESA interim EPA only refers to very general IPR provisions without specifying rights and obligations for different types of IP. The 2013 agreement between Mauritius and Turkey includes several general provisions, provisions on assistance through development cooperation and general conditions on IPR enforcement and implementation. The Mauritius-Turkey agreement also includes a clause on reaffirmation and compliance with TRIPS provisions.

⁹ EPA between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part. Available at <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:289:0003:1955:EN:PDF>.

3. State of IP protection in ESA countries

3.1 Comoros

According to WIPO's database of IPR-related laws and regulations, Comoros, for a long time, applied relatively old legislation for the protection of trademarks, copyrights, industrial designs, and patents. These laws are outlined in Table 1. At the same time, Comoros is a member of the Paris Convention. In 2013, the Union of Comoros deposited its instrument of accession to the Bangui Agreement and became the 17th Member Country of OAPI on 25 May 2013. Comoros agreed to renounce any of its enacted intellectual property legislation in place before accession to the Agreement. Essentially trademark, patent and copyright protection in Comoros is now governed by the Agreement.¹⁰ At the same time, patent and design protection is still not available in Comoros. Major characteristics of the legal treatment of IPR in Comoros are outlined in Table 2.

Table 1: Main IP laws, Comoros

Year	Title	Subject Matter
1844	Law of 5 July 1844, on Patents for Inventions	Patents (Inventions), Enforcement of IP and Related Laws, IP Regulatory Body
1913	Law of 14 July 1909, on Designs and Models (as amended by the Decree of 12 February 1913)	Industrial Designs, Enforcement of IP and Related Laws, IP Regulatory Body
1957	Law of 11 March 1957, on Literary and Artistic Property	Copyright and Related Rights (Neighboring Rights), Enforcement of IP and Related Laws
1964	Law No. 64-1360 of 31 December 1964, on Trademarks and Service Marks	Trademarks

Source: WIPO

Table 2: Major characteristics of domestic IPR legislation, Comoros

Category	Provisions
Trademarks	Any trademark registration falling due for renewal after this date will automatically be extended to Comoros with effect from the date of renewal. Proprietors who do not wish to wait until their registrations fall due for renewal but wish to apply for the extension of existing OAPI rights to Comoros have to make a formal application to OAPI. The exception to this arrangement is the Island of Mayotte, an overseas territory of France, and a French registration automatically extends to it.
Patents	Comoros is a member of the Paris Convention and PCT. Even though Comoros is a member of the PCT, having deposited its instrument of accession in 2005, the filing of a patent application is not possible at this time as Comoros has no patent legislation. Accordingly, in the absence of any legislation, no patent protection is currently available in this country.
Designs	Comoros is a member of the Paris Convention. No design protection is currently available in Comoros.
Copyrights	Comoros is a member of the Berne Convention. Although the copyright law was put into effect by government order, as indicated above, it is unclear whether the law is being applied.

¹⁰ Adams and Adams (2021). Comoros IP guide. Available at <https://www.adams.africa/works/comoros/>.

Plant breeders' rights	No Provisions.
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Source: Adams and Adams¹¹

3.2 Madagascar

Madagascar applies the legislation to protect copyrights and related rights, trademarks, patents, industrial designs, and traditional cultural expressions. Madagascar's main IPR laws are outlined in Table 3. Major characteristics of domestic IPR legislation in Madagascar are outlined in

¹¹ Adams and Adams (2021). Comoros IP guide. Available at <https://www.adams.africa/works/comoros/>.

Table 4.

Table 3: Main IP laws, Madagascar

Year	Title	Subject Matter
1984	Decree No. 84-389 of 13 November 1984, creating the Malagasy Copyright Office	Copyright and Related Rights (Neighbouring Rights), IP Regulatory Body
1990	Decree No. 90-260 of 21 June 1990, modifying and completing the provisions of Decree No. 84-389 of 13 November 1984, establishing the Malagasy Copyright Office	Copyright and Related Rights (Neighbouring Rights), IP Regulatory Body
1992	Ordinance No. 89-019 of 31 July 1989, establishing Arrangements for the Protection of Industrial Property	Patents (Inventions), Industrial Designs, Trademarks, Trade Names, Competition, Enforcement of IP and Related Laws
1993	Decree No. 92-994 of 2 December 1992, on the Creation and Organization of the Malagasy Industrial Property Office (OMAPI)	IP Regulatory Body
1994	Law No. 94-036 of 18 September 1995, on Literary and Artistic Property	Copyright and Related Rights (Neighboring Rights), Enforcement of IP and Related Laws, Traditional Cultural Expressions, IP Regulatory Body
1998	Decree No. 98-434 of 16 June 1998, on the Status and Functioning of the Malagasy Copyright Office	Copyright and Related Rights (Neighboring Rights), IP Regulatory Body
1998	Decree No. 98-435 of 16 June 1998, on General Rules for the Collection of Copyright and Neighboring Rights	Copyright and Related Rights (Neighboring Rights), IP Regulatory Body

Source: WIPO

Table 4: Major characteristics of domestic IPR legislation, Madagascar

Category	Provisions
Trademarks	Madagascar is a member of the Paris Convention, the Madrid Protocol and the WTO/TRIPS. Trademark applications may be filed as national applications, in appropriate circumstances claiming convention priority in terms of the Paris Convention, or the country may be designated in international applications filed in terms of the Madrid Protocol. Provision is made for the registration of trademarks for goods and services and collective marks.
Patents	Madagascar is a member of the Paris Convention, the PCT and the WTO/TRIPS. Patent protection is available via a national filing. Patent protection may also be obtained through a national phase application based on an international application under the PCT designating Madagascar.
Designs	Madagascar is a member of the Paris Convention and the WTO/TRIPS. Design protection is available by way of a national filing.
Copyrights	Madagascar is a member of the Berne Convention and the WTO/TRIPS. The law provides for copyright in respect of all intellectual works, whatever their genre, a form of expression or merit, including: <ul style="list-style-type: none"> • books, brochures and other literary, artistic and scientific writings • lectures, speeches, addresses, sermons • dramatic and dramatic-musical works • choreographic works, pantomimes • musical works • cinematographic and audiovisual works • works of art, architecture, painting, drawing, sculpture, etc. • graphic and typographic works • photographic works • works of applied art or craft • illustrations and geographical maps • plans, sketches and plastic works relating to geography, topography, architecture • software programs • works of folklore • translations, adaptations, arrangements of works • databases or compilations of data.
Plant breeders' rights	Currently, no legislative provision for plant breeders' rights or other sui generis protection for plants is available in Madagascar.

Source: Adams and Adams¹²

IPR enforcement in Madagascar is relatively weak. According to the 2020 International Property Rights Index (IPRI).¹³ Madagascar's 2020 score is lower compared to its (latest) 2018 score. Between 2018 and 2020, Madagascar's IPRI score decreased by -0.085 index points to 4.041, placing the country 25th in the Africa

¹² Adams and Adams (2021). Madagascar IP guide. Available at <https://www.adams.africa/works/madagascar/>.

¹³ The IPRI is published by the Property Rights Alliance. The IPRI scores the underlining institutions of a strong property rights regime: the legal and political environment, physical property rights, and intellectual property rights. It is the world's only index entirely dedicated to the measurement of intellectual and physical property rights. Covering 129 countries, the 2020 IPRI reports on the property rights systems affecting 98 percent of world Gross Domestic Product and 94 percent of world population.

region and 122nd of 129 countries globally. Madagascar's legal and political sub-index decreased by 0.82 to 3.300, with scores of 2.316 in judicial independence, 3.372 in rule of law, and 2.999 in Control of Corruption. Madagascar's physical property rights sub-index increased by 0.059 to 4.633 with scores of 3.67 in the perception of property rights protection, 6.841 in registering property, and 3.39 in ease of access to loans. Madagascar's IPR sub-index decreased by 0.231 to 3.936 with scores of 3.506 in the perception of IP protection, 4.367 in patent protection. Data were not available to measure Copyright Protection.

As outlined by the International Trade Commission of the US, the “Office Malgache des Droits d’Auteurs (OMDA)” protects authors’ rights and copyrights. OMDA’s mission is to ensure the exclusive protection, defence and management of the economic interests of Malagasy and foreign authors, performers, and their successors concerning the use of scientific, literary, and artistic works. While, officially, OMDA aims to protect against IP infringement, its enforcement capacity is rather limited. Poor IPR enforcement is driven by resource constraints, including poor digitalisation, weakness of the judicial system, and lack of awareness of intellectual property rights among businesses and consumers. It is reported that, due to these constraints, international investors have faced difficulties defending their interests. It is further reported that the government of Madagascar neither tracks nor reports seizures of counterfeit goods, which are generally easily available in local markets, as are unauthorised copies of popular brands, songs, and videos.¹⁴

The International Trade Commission of the US also reports that new IPR laws have stalled for years due to inaction by parliament and the Office of the Prime Minister. The proposed legislation incorporates The Hague (international registration of industrial designs), Lisbon (protection of origin appellation and international registration) agreements, and other international treaty classifications. The adoption of these bills would substantially improve the IP rights in Madagascar, provided OMAPI has sufficient funding for enforcement.

Madagascar has accepted the Protocol amending the TRIPS Agreement, which serves to permanently incorporate into the TRIPS Agreement additional flexibilities to grant special compulsory licences for the export of medicines, commonly referred to as the “Paragraph 6 System”.¹⁵

3.3 Mauritius

Mauritius applies legislation to protect patents, industrial designs, trademarks and related rights, plant varieties, traditional cultural expressions, and geographical indications. Mauritius’ main IPR laws are outlined in Table 5. Major characteristics of domestic IPR legislation in Mauritius are outlined in

Table 6.

Table 5: Main IP laws, Mauritius

Year	Title	Subject Matter
2002	Patents, Industrial Designs and Trademarks Act 2002	Patents (Inventions), Industrial Designs, Trademarks, Enforcement of IP and Related Laws, IP Regulatory Body
2014	The Copyright Act 2014 (Act No. 2 of 2014)	Copyright and Related Rights (Neighbouring Rights), Enforcement of IP and Related Laws, Traditional Cultural Expressions, IP Regulatory Body

¹⁴ International Trade Commission of the US (2020). Madagascar - Country Commercial Guide, Intellectual Property Protection. Available at <https://www.trade.gov/country-commercial-guides/madagascar-intellectual-property-protection>.

¹⁵ WTO (2021). Amendment of the TRIPS Agreement. Available at https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

2015	Industrial Property Act 2014 (Act No. 7 of 2014)	Patents (Inventions), Utility Models, Industrial Designs, Trademarks, Geographical Indications, Trade Names, Layout Designs of Integrated Circuits, Competition, Undisclosed Information (Trade Secrets), Enforcement of IP and Related Laws, Transfer of Technology, IP Regulatory Body, Industrial Property
2018	The Copyright (Amendment) Act 2017 (Act No. 13 of 2017)	Copyright and Related Rights (Neighbouring Rights), Enforcement of IP and Related Laws, IP Regulatory Body
2019	The Industrial Property Act 2019 (Act No. 15 of 2019)	Patents (Inventions), Utility Models, Trademarks, Geographical Indications, Trade Names, Layout Designs of Integrated Circuits, Competition, Plant Variety Protection, Enforcement of IP and Related Laws, IP Regulatory Body, Industrial Property

Source: WIPO

Table 6: Major characteristics of domestic IPR legislation, Mauritius

Category	Provisions
Trademarks	Mauritius is a member of the Paris Convention and the WTO/TRIPS.
Patents	Mauritius is a member of the Paris Convention and the WTO/TRIPS. Patent protection is available by way of a national filing. Although Mauritius has not yet acceded to the PCT, the Act has specific provisions referring to the PCT and providing for international applications under PCT to designate Mauritius. However, until Mauritius accedes to the PCT, it will not be possible to designate Mauritius in an international application under PCT.
Designs	Mauritius is a member of the Paris Convention and the WTO/TRIPS. Design protection is available by way of a national filing.
Copyrights	<p>Mauritius is a member of the Berne Convention, the Universal Copyright Convention and the WTO/TRIPS.</p> <p>The law provides for copyright in respect of artistic, literary and scientific works, including:</p> <ul style="list-style-type: none"> • books, pamphlets, or other writings • illustrations, maps, plans or sketches • lectures, addresses, sermons • dramatic and dramatic-musical works • musical works • choreographic works, pantomimes • audiovisual works • sound recordings • works of art, architecture, painting, drawing, sculpture, engravings, lithography • photographic works • works of applied art or craft • computer programs • works of folklore • derivative works. <p>Derivative works include</p> <ul style="list-style-type: none"> • translations, adaptations, arrangements of works

	<ul style="list-style-type: none"> • collections and compilations of works. <p>Excluded from protection are:</p> <ul style="list-style-type: none"> • ideas, procedures, systems, methods of operation, concepts, principles • official texts of laws, decisions by courts, or administrative bodies.
Plant breeders' rights	Conditions for protection outlined in the Industrial Property Act from 2019.

Source: Adams and Adams¹⁶

Mauritius's 2020 IPRI score increased by 0.062 to 6.359, placing it 1st in the Africa region and 40th of 129 countries globally. Mauritius's legal and political sub-index increased by 0.072 to 6.516 with scores of 6.922 in judicial independence, 6.559 in rule of law, 7.043 in political stability, and 5.539 in control of corruption. Mauritius's physical property rights sub-index increased by 0.106 to 7.328 with scores of 7.193 in the perception of property rights protection, 9.447 in registering property, and 5.343 in ease of access to loans. Mauritius's intellectual property rights sub-index increased by 0.006 to 5.235 with scores of 5.771 in the perception of intellectual property protection, 5.133 in patent protection, and 4.8 in copyright protection.

The government of Mauritius generally recognises the importance of IPRs for economic development. In 2017, it announced an IPR development plan to promote innovation and creativity in the country. The plan recommended the following be implemented: establishment of a single IP office based on international best experiences, strengthen the legal framework to cover protection of new plant varieties and design and implement intellectual property awareness programmes tailored to meet the needs of enforcement officers and create and strengthen awareness of consumers on the adverse impact of IPRs infringement. Additional types of protection were implemented in 2019 include protection of plant varieties.

While IPR laws in Mauritius are generally consistent with international norms, enforcement is still relatively weak. As outlined by the International Trade Administration of the US, Mauritius' authorities will normally only take action when the IPR owner has an official representative in Mauritius because the courts require a representative to testify that the products seized are counterfeit or otherwise legally problematic. As announced by the Mauritius Revenue Authority, the Customs Department requires owners or authorised users of patents, industrial designs, collective marks, marks or copyrights to apply in writing to the Director-General to suspend clearance of any suspicious goods. Once an application is approved, it remains valid for two years.¹⁷

Mauritius has accepted the Protocol amending the TRIPS Agreement, which serves to permanently incorporate into the TRIPS Agreement additional flexibilities to grant special compulsory licences for the export of medicines, commonly referred to as the "Paragraph 6 System".¹⁸

3.4 Seychelles

The government of Seychelles has enacted a new Industrial Property in 2014, repealing previous legislation governing industrial property and has been in force since 1 March 2015. Seychelles now applies the legislation to protect patents, utility models, industrial designs, layout designs of integrated circuits, trademarks, including collective marks, certification marks and geographical indications, unfair competition and undisclosed information, and enforcement of industrial property rights (both civil and criminal provisions). Seychelles' main

¹⁶ Adams and Adams (2021). Mauritius IP guide. Available at <https://www.adams.africa/works/mauritius/>.

¹⁷ Mauritius Revenue Authority (2021). Available at <https://www.mra.mu/download/BrochureIPR.pdf>. Pre-requirements for application are as follows: certified copy of registration card from Industrial Property Office; any evidence of being the owner or the authorized user of a patent, industrial design or a copyright; a Power of attorney in case not being the right owner; and a security in the form of a bank guarantee.

¹⁸ WTO (2021). Amendment of the TRIPS Agreement. Available at https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

IPR laws are outlined in Table 7. Major characteristics of domestic IPR legislation in Seychelles are outlined in Table 8.

Table 7: Main IP laws, Seychelles

Year	Title	Subject Matter
2014	Copyright Act, 2014 (Act No. 5 of 2014)	Copyright and Related Rights (Neighbouring Rights), Enforcement of IP and Related Laws, Traditional Cultural Expressions, IP Regulatory Body
2015	Industrial Property Act 2014 (Act No. 7 of 2014)	Patents (Inventions), Utility Models, Industrial Designs, Trademarks, Geographical Indications, Trade Names, Layout Designs of Integrated Circuits, Competition, Undisclosed Information (Trade Secrets), Enforcement of IP and Related Laws, Transfer of Technology, IP Regulatory Body, Industrial Property

Source: WIPO

Table 8: Major characteristics of domestic IPR legislation, Seychelles

Category	Provisions
Trademarks	Seychelles is a member of the Paris Convention and the World Trade Organisation. The Industrial Property Act 7 of 2014 only came into effect on 1 March 2015, and the commentary given below is based on the information available at the time of writing. Provision is made to register trademarks for goods and services and certification marks, and collective marks. Three-dimensional marks and well-known marks are also expressly protected.
Patents	Patent protection is available via a national filing or registration of a UK-granted patent in Seychelles. Although it is possible in a PCT international application to designate Seychelles, the laws in Seychelles have not been amended to cater for the PCT. Accordingly, it is unclear whether enforceable rights will be obtained via PCT national phase filings in Seychelles.
Designs	A United Kingdom design extends automatically to Seychelles.
Copyrights	<p>Seychelles is not a member of the Berne Convention.</p> <p>The Act provides for the following works to be eligible for copyright protection:</p> <ul style="list-style-type: none"> • literary works • musical works • artistic works • performances of literary or musical works • films • sound recordings <p>Copyright is also provided for works of Seychelles folklore. Special provisions apply to the copyright in Seychelles folklore.</p> <p>Literary works are further defined to include:</p> <ul style="list-style-type: none"> • books, novels, stories, poetic works • plays, mime, stage directions, film scenarios, broadcasting scripts • textbooks, treatises, histories, biographies, essays, articles • scientific works, tables and compilations of data • encyclopaedias, dictionaries • letters, reports, memoranda

	<ul style="list-style-type: none">• lectures, addresses and sermons• computer programs. <p>Artistic works are further defined to include:</p> <ul style="list-style-type: none">• paintings, drawings, etchings, lithographs, woodcuts, collage, prints, engravings• maps, plans, diagrams, sketches or illustrations• works of sculpture• three-dimensional works relating to geography, topography, or science• photographs• works of architecture• works of artistic craftsmanship or applied art.
Plant breeders' rights	Currently, no legislative provision for plant breeders' rights or other sui generis protection for plants is available in Seychelles.

Source: Adams and Adams¹⁹

Until April 2014, Intellectual property rights in Seychelles were governed by three pieces of legislation, the Patents Act (1901), the Trademark Decree (1977) and the Copyright Act (1984). It was generally accepted that IP rights enforcement capacity was weak because, although some individuals have been trained to do so, this task has been continuously neglected because of the lack of human resources. It has also been very difficult for the ministries and departments to attract suitably qualified people to work in the area, leading to limited reform.²⁰

The Industrial Property Act 2014 (Act No. 7 of 2014) was designed to provide for the adequate protection and enforcement of industrial property rights, to encourage local inventive and innovative activities, stimulate the transfer of foreign technology, promote foreign direct investment, create a competitive business environment, discourage unfair practices, enhance free and fair practices and to foster socio-economic development in the region.²¹ The Ministry of Finance of Seychelles is now actively calling on companies, particularly SMEs, to register IP in Seychelles to stimulate the economic diversification of the economy.²²

Seychelles has accepted the Protocol amending the TRIPS Agreement, which serves to permanently incorporate into the TRIPS Agreement additional flexibilities to grant special compulsory licences for the export of medicines, commonly referred to as the "Paragraph 6 System".²³

¹⁹ Adams and Adams (2021). Seychelles IP guide. Available at <https://www.adams.africa/works/seychelles/>.

²⁰ Seychelles Trade Portal (2021). Brief on IPR in the Seychelles. Available at <http://www.seychellestradeportal.gov.sc/content/article/trips>.

²¹ von Seidels (2021). Seychelles IP Update. Available at <https://www.vonseidels.com/ip-update-seychelles/>.

²² Eurasia Review (2021). Seychelles: Ministry Of Finance Wants Intellectual Property To Be Registered. Available at <https://www.eurasiareview.com/17052021-seychelles-ministry-of-finance-wants-intellectual-property-to-be-registered/>.

²³ WTO (2021). Amendment of the TRIPS Agreement. Available at https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

3.5 Zimbabwe

Zimbabwe applies international patent and trademark conventions, and it is a member of WIPO. Zimbabwe applies legislation to protect copyrights and related rights, patents, industrial designs, trademarks, traditional cultural expressions, and geographical indications. Zimbabwe's main IPR laws are outlined in Table 9. Major characteristics of domestic IPR legislation in Zimbabwe are outlined in Table 10.

Table 9: Main IP laws, Zimbabwe

Year	Title	Subject Matter
2001	Geographical Indications Act (Chapter 26:06)	Trademarks, Geographical Indications, Enforcement of IP and Related Laws, IP Regulatory Body
2001	Plant Breeders Rights Act (Chapter 18:16)	Trademarks, Trade Names, Plant Variety Protection, Enforcement of IP and Related Laws, IP Regulatory Body
2001	Industrial Designs Act (Chapter 26:02, as amended up to Act No. 25 of 2001)	Industrial Designs, Copyright and Related Rights (Neighbouring Rights), Enforcement of IP and Related Laws, IP Regulatory Body
2001	Integrated Circuit Layout Designs Act (Chapter 26:07)	Patents (Inventions), Industrial Designs, Trademarks, Layout Designs of Integrated Circuits, Enforcement of IP and Related Laws, IP Regulatory Body, Industrial Property
2001	Merchandise Marks Act (Chapter 14:13)	Trademarks, Trade Names, Competition, Enforcement of IP and Related Laws
2002	Patents Act (Chapter 26:03, as amended up to Act No. 14/2002)	Patents (Inventions), Competition, Enforcement of IP and Related Laws, IP Regulatory Body
2004	Copyright and Neighbouring Rights Act (Chapter 26:05, as amended up to Act No. 32 of 2004)	Copyright and Related Rights (Neighboring Rights), Enforcement of IP and Related Laws, Traditional Cultural Expressions, IP Regulatory Body
2010	Intellectual Property Tribunal Act (Chapter 26:08)	Enforcement of IP and Related Laws, IP Regulatory Body
2010	Trade Marks Amendment Act, 2001 (Act No. 10 of 2001)	Trademarks, Enforcement of IP and Related Laws, IP Regulatory Body
2016	Trade Marks Act (Chapter 26:04, as amended up to Act No. 3 of 2016)	Trademarks, Enforcement of IP and Related Laws, IP Regulatory Body

Source: WIPO

Table 10: Major characteristics of domestic IPR legislation, Zimbabwe

Category	Provisions
Trademarks	Zimbabwe is a member of the Paris Convention, the ARIPO (Banjul Protocol), and the WTO/TRIPS. The Act provides for the registration of trademarks in respect of goods and services. The protection afforded by registration extends to the use of an identical mark or a mark so nearly resembling the registered mark to be likely to deceive or cause confusion regarding the goods or services in respect of which the mark is registered. The Act provides for registrations of trademarks in Part A or Part B of the register; certification marks are registered in Part C of the register; defensive marks are registered in Part D of the register.

Patents	Zimbabwe is a member of the Paris Convention, ARIPO (Harare Protocol), the PCT and the WTO/TRIPS. Patent protection is available through a national filing or via an ARIPO or PCT application designating Zimbabwe. Zimbabwe has implemented the Harare Protocol (which regulates patent and design filings in ARIPO) in its national law, giving valid patent protection to applicants seeking a patent via an ARIPO application. Since Zimbabwe is a member of the Paris Convention, a national application may claim priority based on an earlier application in a convention country. Zimbabwe has also implemented the provisions of the PCT in its national law, thereby recognising and affording valid patent protection in the case of international PCT applications designating Zimbabwe.
Designs	Zimbabwe is a member of the Paris Convention, ARIPO (Harare Protocol), and the WTO/TRIPS. Design protection is available by a national filing or via an ARIPO application designating Zimbabwe. Zimbabwe has implemented the Harare Protocol (which regulates patent and design filings in ARIPO) in its national laws, giving valid design protection to applicants seeking a design registration via an ARIPO application.
Copyright	<p>Zimbabwe is a member of the Berne Convention and the WTO/TRIPS.</p> <p>The Act provides for the following works to be eligible for copyright protection:</p> <ul style="list-style-type: none"> • literary works • musical works • artistic works • audiovisual works • sound recordings • broadcasts • programme-carrying signals • published editions. <p>Literary works are further defined to include:</p> <ul style="list-style-type: none"> • dramatic works, stage directions, film scenarios, broadcasting scripts • letters, reports, memoranda • lectures, addresses and sermons • computer programs • tables and compilations of data. <p>Artistic works are further defined to include:</p> <ul style="list-style-type: none"> • graphic works, photographs, sculptures or collages (irrespective of artistic quality) • works of architecture • works of artistic craftsmanship. <p>Graphic works are further defined to include:</p> <ul style="list-style-type: none"> • paintings, drawings, diagrams, maps, charts or plans • engravings, etchings, printed circuits, lithographs, woodcuts. <p>The following items and documents are not eligible for copyright:</p> <ul style="list-style-type: none"> • ideas, procedures, systems, methods of operation, concepts, principles, discoveries, facts or figures • news of the day, items of press information • speeches of a political nature, or delivered in the course of legal proceedings • official texts of enactments or Bills

	<ul style="list-style-type: none"> • official records of judicial proceedings • notices, advertisements published in the Gazette • applications, specifications published in the Patent and Trade Marks Journal • entries in any register kept in terms of an enactment.
Plant breeder's rights	Zimbabwe is, as yet, not a member of the International Convention for the Protection of New Varieties of Plants (UPOV) Convention for the Protection of New Varieties of Plants. Plant breeders' rights can be obtained under the Zimbabwean Plant Breeders' Rights Act. The effect of protection by way of a plant breeder's right is that the holder of the right is entitled to prevent anyone from selling, reproducing or multiplying reproductive material of the protected plant or a plant essentially derived from there. Convention priority: Priority can be claimed from an earlier application in a UPOV member country. Duration: A plant breeder's right endures for 20 years from the date of grant. A five-year extension can be obtained in exceptional circumstances.

Source: Adams and Adams.²⁴

Despite having legislation in place, IPR enforcement in Zimbabwe is relatively weak. According to 2020 data, Zimbabwe's IPRI score increased by 0.221 to 3.96, placing it 24th in the Africa region and 121st out of 129 countries globally. Zimbabwe's legal and political sub-index increased by 0.069 to 3.048 with scores of 3.039 in judicial independence, 2.453 in rule of law, 4.171 in political stability, and 2.529 in control of corruption. Zimbabwe's physical property rights sub-index increased by 0.225 to 5.058 with scores of 3.064 in the perception of property rights protection, 9.072 in registering property, and 3.038 in ease of access to loans. Zimbabwe's intellectual property rights sub-index increased by 0.37 to 3.773 with scores of 4.218 in the perception of intellectual property protection, 6 in patent protection, and 1.1 in copyright Protection.

In 2018, the Zimbabwean government instituted and operationalised an Intellectual Property Tribunal, with the mandate to speedily preside over all IP matters, disputes, infringements, passing off and other related issues. The Intellectual Property Tribunal Act, 2001 had been brought into operation by statutory instruments in September 2010. That was after a period of nine years when that legislation lacked the regulations to operationalise it.²⁵ As reported by the International Trade Commission of the US, Zimbabwe's government officially seeks to uphold IP ownership and rights, but authorities still suffer from a lack of expertise and workforce. In addition, rampant corruption limit authorities' ability to enforce IP obligations. Pirating of videos, music, and computer software is still common.²⁶

Zimbabwe has not accepted the Protocol amending the TRIPS Agreement, which serves to permanently incorporate into the TRIPS Agreement additional flexibilities to grant special compulsory licences for the export of medicines, commonly referred to as the "Paragraph 6 System".²⁷

²⁴ Adams and Adams (2021).Zimbabwe IP guide. Available at <https://www.adams.africa/works/zimbabwe/>.

²⁵ IP Watch (2018). Zimbabwe Establishes An Intellectual Property Tribunal, As A Special Division Of High Court. Available at <https://www.ip-watch.org/2018/03/13/zimbabwe-establishes-intellectual-property-tribunal-special-division-high-court/>.

²⁶ International Trade Commission of the US (2020). Protecting Intellectual Property. Available at <https://www.trade.gov/country-commercial-guides/zimbabwe-protecting-intellectual-property>.

²⁷ WTO (2021). Amendment of the TRIPS Agreement. Available at https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

4. Economic Impact Assessment

4.1 Baseline

In the interim EPA, the parties agreed to a “Rendez-vous clause” for negotiating other trade-related areas, including IPRs, with a view to concluding a full and comprehensive EPA. By the time of the 4th round of negotiations, IPRs were so far not addressed by the negotiators.

4.2 Screening of economic impacts

This section outlines the extent to which different types of major types of IPRs could be covered in a future EU-ESA EPA. Potential economic impacts are summarised by a detailed screening table below. Generally, major impacts can be expected in domestic industries and sub-sectors whose output (goods and services) is characterised by a greater commercial use or legal dependency on IPRs, e.g. trademarks, patents and copyrights. In addition, major impacts can be expected for sectors that use IP-intensive goods or services as an input for production as the market penetration of foreign (EU) IP-intensive goods and services will potentially increase with stronger IP laws and more effective IPR enforcement capacities in ESA countries. By contrast, minor economic impacts can be expected from IPRs less relevant for ESA countries’ domestic production and imports from abroad.

Table 11: Detailed screening table of IPR provisions

Provision	Main economic sectors that could be affected	Possible economic impacts	Potential importance
General provisions	All IP-intensive sectors	<p>Commitment to principles set out in Article 8 of the TRIPS Agreement. The overall spirit of the IP chapter of the EPA should facilitate innovation and promotion of sharing knowledge, technology, culture and arts; thus, improving IPR awareness in ESA countries and trading relations between the Parties. Parties agree that adequate and effective enforcement of intellectual property rights promotes the economic development of ESA countries.</p> <p>Provisions should contribute to an improved climate for investment in research and innovation (technological, commercial, e.g. brands.) and promote imports of IP-protected goods and services.</p>	Major
Trademarks	All economic activities and business models, including licensing that rely on registered brands and trademarks to signal quality and	Registered trademarks protect rightsholders' investments from infringements and contribute to business growth in the domestic economy and internationally. Due to their role as effective marketing tools, registered trademarks can improve the international competitiveness of goods and services originating in ESA countries and incentivise importers to launch goods and	Major

Provision	Main economic sectors that could be affected	Possible economic impacts	Potential importance
	product and service recognition	services in ESA countries. ESA businesses could enter into licensing arrangements with EU partners, both for imports and exports.	
Geographical indications	(Typically) agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products with GI-status in the country of origin (Parties commit to protecting in their territories geographical indications that are not protected in their country of origin)	Economic impacts generally similar to the impacts of registered trademarks but less relevant for ESA countries in the near- to medium-term. ²⁸ In the longer term, a positive impact can be expected if ESA businesses increasingly register for GI protection and market GI-protected products internationally. Longer-term impacts would be higher for larger, more diversified ESA countries, i.e. Madagascar and Zimbabwe.	Minor
Patents	All IP-intensive manufacturing sectors	Stronger patent protection and enforcement would stimulate domestic and foreign investments in innovation and contribute to business growth in the domestic economy and international expansion. The economic impacts on domestic technological innovations in ESA countries will likely be moderate in the near- to medium-term due to ESA countries relatively weak manufacturing sectors. Overall, the economic impacts will likely be more pronounced in larger ESA countries, i.e. Madagascar and Zimbabwe. Generally, EU businesses could also enter more reliable licensing arrangements with ESA businesses, both for imports and exports. Increased market penetration of IP-protected goods (e.g. medicines, machinery equipment, environmental goods) and technologies (e.g. digital and environmental technologies) from the EU would have a positive impact on commercial activities, competition, technology transfer and, in the medium- to long-term, economic development and structural economic change.	Major

²⁸ According to the EU's international registry of geographical indications, producers in ESA5 countries do not yet use geographical indications. The database is available at <https://www.tmdn.org/giview/>.

Provision	Main economic sectors that could be affected	Possible economic impacts	Potential importance
Design-related IP	Business models that intensively use registered designs	Generally, designs are a means for differentiating products and services. Registered designs protect ornamental properties, shapes, configurations, appearance, or pattern of an article of manufacture. As such stronger design, IP protection could positively impact the appearance and recognition of products originating in ESA countries. The impact would be most pronounced in manufacturing sectors that aim to attract final customers. The economic impacts are generally similar to the impacts of registered trademarks but considered significantly lower on aggregate due to limited relevance for ESA countries' manufacturing sectors.	Minor
Copyright	Core copyright-intensive industries and interdependent industries, i.e. industries using copyright-intensive products and services. ²⁹	<p>Copyright industries are involved in creating, producing, and disseminating materials covered by copyright laws and play increasingly important economic roles in contemporary economies. As content industries and new information and communication technologies keep increasing, the overall importance of copyright protection will likely increase over time.</p> <p>The economic impacts are similar to the impacts of patents. Stronger copyright protection and enforcement capacities would stimulate domestic and foreign investments in copyright-intensive production and contribute to business growth in the domestic economy and international expansion. Foreign businesses could enter more reliable licensing arrangements with ESA businesses, both for imports and exports. Increased market penetration of copyright-protected goods, technologies and services (e.g. software and software-enabled services from the EU) would positively impact commercial activities, competition, technology transfer and, in the medium- to long-term, economic development and structural economic change.</p>	Major

²⁹ Core copyright-intensive industries are press and literature; music, theatrical productions and opera; motion pictures and video; radio and televisions, photography, software and databases; visual and graphic arts; and advertisement services. For an overview of core interdependent and partial interdependent copyright industries, see WIPO (2005). Copyright-Based Industries: Assessing their Weight. Available at https://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html.

Provision	Main economic sectors that could be affected	Possible economic impacts	Potential importance

Source: own compilation

5. Environmental, social, gender and human rights impacts

5.1 Screening of possible impacts

The following table presents a screening of the possible environmental, social, gender and human rights impacts arising from the possible measures related to intellectual property rights. This screening is linked to the screening of economic impacts in section 4, as the changes in economic impact will play a key role in determining impacts in the other dimensions of sustainable development. Section 5.2 then reviews the key impacts that are identified in this table.

Table 12: Detailed screening table of potential intellectual property rights provisions

Provision	Possible environmental impacts	Possible social, gender and human rights impacts	Potential importance
Trademarks	Trademark provisions could protect consumers from counterfeiting, which may pose environmental risks by using more dangerous chemicals, for instance.	Trademark provisions could protect consumers by helping them identify products and services that meet their expectations. They may shield them from counterfeiting, which may pose health risks.	Minor
Geographical indications	Geographical indications could if linked to environmental standards, help local communities protect their environment.	Provisions on geographical indications may help indigenous peoples and local communities benefit from their creations' protection. Geographical indications could indirectly contribute to the protection of traditional knowledge.	Minor
Patents	Patent protection could increase access to innovative environmental protection technologies.	Patent provisions could increase the introduction of new medicines in ESA countries. However, these provisions could also lead to increases in prices and limit competition. (It is assumed that stringent provisions, which could have even greater impacts, will not be introduced in the Agreement; nor will stringent provisions related to the protection of seed varieties).	Potentially major
Design-related IP	Design-related IP provisions could increase access to innovative	Provisions on design-related IP could help indigenous peoples and local	Minor

Provision	Possible environmental impacts	Possible social, gender and human rights impacts	Potential importance
Copyright	environmental protection technologies.	communities benefit from their creations' protection.	Minor
	No major environmental impacts were identified.	Copyright provisions can protect ESA authors' right to benefit from protecting their interests resulting from their creations. This could include protection for indigenous and local communities for original works based on traditional cultural expressions.	
Traditional knowledge	Provisions protecting traditional knowledge and cultural expressions could encourage indigenous and local communities to conserve biodiversity.	Provisions protecting traditional knowledge and cultural expressions could protect traditional and local communities' economic and cultural heritage.	Major
Other provisions	Technology transfer provisions could help ESA countries access technological solutions to address climate, energy, and biodiversity issues.	Provisions allowing for adopting measures to prevent the abuse of IP rights or practices, such as patent misuse, may act as safeguards to prevent conflicts between IPRs and human rights. Technology transfer provisions could improve ESA capacities in key fields such as health and could contribute to the realisation of the right to the benefits of scientific progress.	Major

Source: Own analysis

5.2 Overview of key impacts and issues

Several EPA provisions on IPRs could significantly impact the environment, human rights, and social aspects in ESA countries. However, this impact will be determined by the scope and obligations of those provisions. Except for Comoros, all ESA countries apply the TRIPS Agreement, which means that, in theory, they adhere to the minimum standards of protection in the main areas of IP covered by the TRIPS Agreement. Therefore, EPA provisions on IPRs aligned with the TRIPS Agreement's minimum standards of protection should have minor, if any, impacts on social, environmental, and human rights aspects in ESA countries. EPA provisions and EU development cooperation could support the implementation of these standards.

It is expected that EPA provisions will not establish more stringent IPR provisions, such as patents for medicines or patents and protection for plant varieties, as they could harm human rights, including the right to health and the right to food, in lower-income countries. More stringent provisions could undermine the safeguards and flexibilities³⁰ under TRIPS. While more stringent provisions could increase the introduction of new medicines in ESA countries, they might override existing provisions for developing countries and raise the

³⁰ TRIPS flexibilities that have been used to address public health concerns include: Objectives and principles; Transitional periods for implementation of TRIPS; Exhaustion of rights; Exceptions to patent rights; Compulsory licences.

prices of pharmaceuticals and other medical goods, restricting access.^{31,32} Madagascar, Mauritius and Seychelles have accepted the Protocol amending the TRIPS Agreement: this provides flexibility to grant special compulsory licences for the export of medicines, and thus allows developing countries the possibility to import, for example, generic versions of a patented medicine from a third country if needed to address health needs.

Similarly, if more stringent provisions were included in areas related to agriculture – such as provisions calling for the ratification and implementation of the UPOV Convention. These could have a potentially negative impact on the right to food.³³ None of the ESA countries is a Contracting Party to the UPOV Convention (see Table 13). In these areas, moreover, the European Parliament called in 2007³⁴ for avoiding more stringent IPR provisions related to medicines in agreements with the African, Caribbean and Pacific countries, and in 2013³⁵ for refraining from provisions that may create obstacles to the reliance of farmers on harvested seeds, as this would violate the right to food in developing countries.

ESA countries (except Comoros) and the EU are Contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture, which establishes a global system to provide farmers, plant breeders and scientists with access to plant genetic materials and ensures that recipients share the benefits derived from the use of these genetic materials with the countries from which they have been originated. The IPR chapter could support ESA and EU implementation of this Treaty.

The IP regime under the EPA could impact biodiversity conservation and rights related to genetic resources. The TSD chapter of the EPA calls for the implementation of the Convention on Biological Diversity (CBD) and the Nagoya Protocol on Access and Benefit-Sharing (Nagoya Protocol), both of which have been ratified by ESA countries. In particular, the Nagoya Protocol aims at the fair and equitable sharing of the benefits arising from utilising genetic resources, including by appropriate access to genetic resources and appropriate transfer of relevant technologies. To strengthen links between IPR and the CBD and the Nagoya Protocol, given negative past experiences in ESA countries,³⁶ these international instruments could be cited in the IPR Chapter; alternatively, the IPR Chapter could provide a cross-reference to the TSD Chapter.

Table 13: Party to relevant international instruments on intellectual property and genetic resources

Parties	TRIPS	UPOV Convention	CBD	Nagoya Protocol	International Treaty on Plant Genetic Resources for Food and Agriculture
Comoros	No	No	Yes	Yes	No
Madagascar	Yes	No	Yes	Yes	Yes

³¹ UN General Assembly, 'Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Anand Grover' (31 March 2009) UN Doc. A/HRC/11/12, para 70. See also:

³² Vadi, V. S. (2009). Trade mark protection, public health and international investment law: strains and paradoxes. *European Journal of International Law*, 20(3), 773-803.

³³ See UN General Assembly, 'The right to food. Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation', Report of the Special Rapporteur on the right to food (23 July 2009) UN Doc A/64/170 ; Chiarolla, C. (2015). Right to food and intellectual property protection for plant genetic resources. In *Research handbook on human rights and intellectual property*. Edward Elgar Publishing; Oke, E. K. (2020). Do agricultural companies that own intellectual property rights on seeds and plant varieties have a right-to-food responsibility?. *Science, Technology and Society*, 25(1), 142-158.

³⁴ European Parliament resolution of 12 July 2007 on the TRIPS Agreement and access to medicines, para 11.

³⁵ European Parliament resolution of 15 January 2013 on development aspects of intellectual property rights on genetic resources: the impact on poverty reduction in developing countries (2012/2135(INI)).

³⁶ The commercialization of the Madagascar periwinkle as drug to treat cancer (before the CBD and the Nagoya Protocol) reportedly did not benefit people in Madagascar. See: Puri, M., Masum, H., Heys, J., & Singer, P. A. (2010). Harnessing biodiversity: the Malagasy Institute of Applied Research (IMRA). *BMC international health and human rights*, 10(1), 1-8.

Parties	TRIPS	UPOV Convention	CBD	Nagoya Protocol	International Treaty on Plant Genetic Resources for Food and Agriculture
Mauritius	Yes	No	Yes	Yes	Yes
Seychelles	Yes	No	Yes	Yes	Yes
Zimbabwe	Yes	No	Yes	Yes	Yes
EU	Yes	Yes	Yes	Yes	Yes

IPR provisions may impact traditional knowledge held by indigenous peoples and local communities, including knowledge related to genetic resources.³⁷ Provisions on geographical indications could help indigenous peoples and traditional communities protect the moral and material interests in their creations and protect traditional knowledge for future generations.³⁸ Furthermore, if the IPR Chapter contains provisions on protecting traditional knowledge and cultural expressions (as do EU Agreements with some Andean countries),³⁹ these would further protect communities in ESA countries.⁴⁰ While the Nagoya Protocol addresses traditional knowledge associated with genetic resources, provisions on traditional knowledge in the IPR chapter could support broader protections for indigenous and local communities.

The IPR chapter could moreover cite provisions that protect and/or promote human rights. To promote competition, the EPA could include abuse-of-rights provisions, which complement other EPA provisions related to competition law and technology transfer provisions, which could promote the protection of human rights, particularly the right to the benefits of scientific progress.

6. Policy recommendations

IPR protection is highly important to businesses across different sectors of the economy. Exchanges of knowledge and technologies are facilitated by guaranteeing that foreign IP rightsholders will be treated fairly, and their IPRs will be respected. Except for Comoros, all ESA countries have legislation in place to protect common and internationally well-established IP rights, namely trademarks, patents, designs, and copyrights. At the same time, IPR enforcement is perceived as weak for all ESA countries due to a lack of institutional and human resource capacities. Also, counterfeit products are common in ESA countries. Pirating of videos, music, and computer software is common in at least some ESA countries.

The “Rendez-vous clause” in the interim EPA foresees the inclusion of IP protection in a more comprehensive EPA. Generally, going beyond generic provisions on TRIPS principles. Deeper IPR disciplines would facilitate domestic and international business operations, including licensing, product launches and technology transfer. Stronger IPRs and more effective enforcement capacities would give more reliable assurances to investors and thereby contribute to an improved investment climate conducive to attracting foreign direct investment in individual ESA countries.

³⁷ UNHRC, ‘Report of the Special Rapporteur on the rights of indigenous peoples’ (11 August 2016) UN Doc A/HRC/33/42, para 74.

³⁸ Peter, K. Y. (2014). EU economic partnership agreements and international human rights. In *EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?* (pp. 109-131). Springer, Berlin, Heidelberg. WIPO, ‘Frequently Asked Questions: Geographical Indications’. Available at https://www.wipo.int/geo_indications/en/faq_geographicalindications.html.

³⁹ Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2012:354:FULL&from=EN>

⁴⁰ Peter, K. Y. (2014). EU economic partnership agreements and international human rights. In *EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?* (pp. 109-131). Springer, Berlin, Heidelberg.

The EU should generally aim to achieve deeper integration in the region in the field of IPRs. EU negotiators should aim for further harmonisation of IP laws and regulations. Areas of cooperation should include the regional management and enforcement of existing national IP laws and the creation and management of additional IPRs, e.g. IP on plant varieties, where appropriate.

The EU should include key IP provisions in the agreement, i.e. commitment to TRIPS principles, and aim to promote regional legal harmonisation. Future provisions should also aim to prevent licensing practices or conditions on intellectual property rights which could adversely affect the international transfer of technology and practices that constitute an abuse of IPRs. EU negotiators should strive for a common registration system for copyrights, trademarks, GIs, industrial designs, patents, and utility models. The EU could consider IP on plant varieties and genetic resources, where appropriate.

For GIs, the EU should seek to increase the number of GIs recognised by ESA countries. Future provisions should aim to replicate commitments in the Comprehensive Economic and Trade Agreement (CETA) or, at least, commitments stipulated in the EPA with the Southern African Development Community (SADC), which was signed in 2016. It should be noted that South Africa agreed to protect more than 250 EU names spread over the categories of foodstuff products, wines and spirits.

A future EU-ESA EPA should also aim to accentuate cooperation in the fight against counterfeit products, ensuring appropriate controls at ESA borders to fight counterfeit goods and illicit trade. Accordingly, EU development cooperation funds should be devoted to capacity building in responsible IP authorises and national customs authorities.

Development cooperation activities should focus on assisting ESA governments in developing global IP infrastructure and building awareness and respect for IP. Development cooperation initiatives on IPRs should involve IP-centric international organisations such as WIPO, ARIPO and OAPI, which would contribute to accumulating specific knowledge and creating an IP level playing field across African countries.

IPR provisions should recognise the diverse levels of socio-economic and technological development amongst the ESA countries. In particular, the IPR regime should meet ESA countries' development needs, particularly Comoros, Madagascar, and Zimbabwe, while also strengthening environmental protection, social conditions, and respect for human rights in those countries. In this regard, it is expected that the EPA will not include TRIPS-plus standards that could infringe upon the right to health and the right to food and that IPR provisions will allow ESA countries, especially low-income ones, to implement TRIPS flexibilities when needed to ensure the realisation of human rights, also reflecting resolutions of the European Parliament.

To ensure compatibility between IPR provisions and biodiversity, social and human rights issues, it would be valuable to make a cross-reference to the TSD Chapter and state that these provisions will be implemented in light of environmental, social, gender and human rights commitments. The CBD, the Nagoya Protocol, and the International Treaty on Plant Genetic Resources for Food and Agriculture could be directly cited in the IPR Chapter, for example, patents.

In line with Articles 66.2 and 67 of TRIPS, the future EPA should encourage and/or require the EU to facilitate technology transfer, technical cooperation, and legal assistance in the ESA countries. These could be key areas for development cooperation, including technical and legal assistance to support ESA countries developing their IPR regimes and capacities. As noted in the report on the TSD Chapter, development cooperation could support the implementation of the CBD and its Nagoya Protocol: support for implementing the International Treaty on Plant Genetic Resources for Food and Agriculture would also be valuable.

References

- Adams and Adams (2021). Comoros IP guide. Available at <https://www.adams.africa/works/comoros/>.
- Adams and Adams (2021). Madagascar IP guide. Available at <https://www.adams.africa/works/madagascar/>.
- Adams and Adams (2021). Mauritius IP guide. Available at <https://www.adams.africa/works/mauritius/>.
- Adams and Adams (2021). Seychelles IP guide. Available at <https://www.adams.africa/works/seychelles/>.
- Adams and Adams (2021). Zimbabwe IP guide. Available at <https://www.adams.africa/works/zimbabwe/>.
- Chiarella, C. (2015). Right to food and intellectual property protection for plant genetic resources. In Research handbook on human rights and intellectual property. Edward Elgar Publishing
- DG Trade website “EU trade agreements: delivering for Europe’s business”, November 2020, <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2211> [accessed 12 November 2020]
- DESTA (2020). Design of Trade Agreements (DESTA) Database. Available at <https://www.designoftradeagreements.org>.
- Ecorys (2014). Ex-post evaluation of the EPA between the EU and its Member States and the CARIFORUM Member States. Available at https://trade.ec.europa.eu/doclib/docs/2019/july/tradoc_158300.pdf.
- EPA between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part. Available at <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:289:0003:1955:EN:PDF>.
- Eurasia Review (2021). Seychelles: Ministry Of Finance Wants Intellectual Property To Be Registered. Available at <https://www.eurasiareview.com/17052021-seychelles-ministry-of-finance-wants-intellectual-property-to-be-registered/>.
- International Trade Commission of the US (2020). Madagascar - Country Commercial Guide, Intellectual Property Protection. Available at <https://www.trade.gov/country-commercial-guides/madagascar-intellectual-property-protection>.
- International Trade Commission of the US (2020). Protecting Intellectual Property. Available at <https://www.trade.gov/country-commercial-guides/zimbabwe-protecting-intellectual-property>.
- IP Watch (2018). Zimbabwe Establishes An Intellectual Property Tribunal, As A Special Division Of High Court. Available at <https://www.ip-watch.org/2018/03/13/zimbabwe-establishes-intellectual-property-tribunal-special-division-high-court/>.
- Mauritius Revenue Authority (2021). Available at <https://www.mra.mu/download/BrochureIPR.pdf>.
- Oke, E. K. (2020). Do agricultural companies that own intellectual property rights on seeds and plant varieties have a right-to-food responsibility?. *Science, Technology and Society*, 25(1), 142-158
- Peter, K. Y. (2014). EU economic partnership agreements and international human rights. In EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse? (pp. 109-131). Springer, Berlin, Heidelberg.
- Puri, M., Masum, H., Heys, J., & Singer, P. A. (2010). Harnessing biodiversity: the Malagasy Institute of Applied Research (IMRA). *BMC international health and human rights*, 10(1), 1-8.

Seychelles Trade Portal (2021). Brief on IPR in Seychelles. Available at
<http://www.seychellestradeportal.gov.sc/content/article/trips>.

von Seidels (2021). Seychelles IP Update. Available at <https://www.vonseidels.com/ip-update-seychelles/>.

UN General Assembly, 'The right to food. Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation', Report of the Special Rapporteur on the right to food (23 July 2009) UN Doc A/64/170

UNHRC (2016), 'Report of the Special Rapporteur on the rights of indigenous peoples' (11 August 2016) UN Doc A/HRC/33/42, para 74.

Vadi, V. S. (2009). Trademark protection, public health and international investment law: strains and paradoxes. European Journal of International Law, 20(3), 773-803.

WIPO (2005). Copyright-Based Industries: Assessing their Weight. Available at
https://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html.

WIPO (undated), 'Frequently Asked Questions: Geographical Indications', available at
https://www.wipo.int/geo_indications/en/faq_geographicalindications.html.

WTO (2021). Amendment of the TRIPS Agreement. Available at
https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

WTO overview of the TRIPS agreement, https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm [accessed 19 May 2020]

Appendix I. Overview of the five ESA countries

The five ESA countries vary greatly in terms of their economic and human development and their environmental context. The table below provides an overview of key indicators across these dimensions.

Table 14: Key economic, environmental, social, gender and human rights indicators (2019 or latest year available)

	Comoros	Madagascar	Mauritius	Seychelles	Zimbabwe
GDP/Capita in US\$ (2019) ⁴¹	1,370	523	11,099	17,448	1,464
Surface area (km ²) ⁴²	1,861	587,295	2,040	460	390,760
Total Population (2019) ⁴³	850,886	26,969,307	1,265,711	97,625	14,645,468
Human Development Index (2018) ⁴⁴	0.538	0.521	0.796	0.801	0.563
Poverty rate (dates vary) ⁴⁵	18.1%	77.6%	0.1%	..	34%
Female employment (2019) ⁴⁶	34.9%	81.8%	40.6%	61.6%	73.8%
Yale EPI (Env. Perf. Index, 2020) ⁴⁷	32.1	26.5	45.1	58.2	37
ND-GAIN score (2017) ⁴⁸	39.2	32.9	55.6	48.4	33.1

Source: World Bank, UNDP, International Labour Organisation (ILO), Yale University, University of Notre Dame

The data for these indicators predate the Covid-19 pandemic, whose impact on the region and individual countries is not yet clear, but it is expected to have far-reaching health and economic consequences. Nonetheless, these indicators show that the five ESA countries vary greatly in economic, environmental, social and human rights conditions.

Comoros is a small lower-middle-income island economy with a comparatively low level of human development. Poverty affects nearly one-fifth of the population. It faces multiple challenges in terms of adequate health, housing and food. Biodiversity is severely degraded, and its islands are prone to natural disasters and vulnerable to climate change impacts. Comoros faces challenges in providing adequate drinking water and sanitation.

⁴¹ GDP per capita (current US\$) – 2019 data for Comoros, Madagascar, Mauritius, Seychelles, Zimbabwe. World Bank Data: Available at <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=KM-MG-MU-SC-ZW>

⁴² Surface area in square kilometres – 2018 data for Comoros, Madagascar, Mauritius, Seychelles, Zimbabwe. World Bank Data: Available at <https://data.worldbank.org/indicator/AG.SRF.TOTL.K2?locations=KM-MG-MU-SC-ZW>

⁴³ Population, total – 2019 data for Comoros, Madagascar, Mauritius, Seychelles, Zimbabwe. World Bank Data: Available at <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=KM-MG-MU-SC-ZW>

⁴⁴ A summary measure of average achievement in key dimensions of human development on a scale of 0 (low) to 1 (high). UNDP data: Available at <http://hdr.undp.org/en/data>

⁴⁵ Share of population below international poverty line. 2019 data for Mauritius and Zimbabwe, 2012 for Comors, 2013 for Madagascar. World Bank data. Available at <https://sdg-tracker.org/no-poverty#targets>

⁴⁶ Employment of female population, 15+. ILO Data: Available at https://www.ilo.org/shinyapps/bulkexplorer54/?lang=en&segment=indicator&id=EMP_2WAP_SEX_AGE_RT_A

⁴⁷ The Environmental Performance Index (EPI) provides a quantified summary of the environmental performance of countries around the world. It uses 32 performance indicators across 11 issue categories. The EPI uses a score of 0 to 100 (the maximum value). 2020 EPI Results: Available at <https://epi.envirocenter.yale.edu/epi-topline>

⁴⁸ The Notre Dame Global Adaptation Initiative (ND-GAIN) score is an index assessing a country's vulnerability to climate change and its resilience and readiness vis-à-vis climate impacts. Overall, 45 indicators contribute to developing the country index, with 36 indicators assessing vulnerability and 9 assessing readiness. Scores range from 0 to 100. Notre Dame Global Adaptation Initiative: Available at <https://gain.nd.edu/our-work/country-index/rankings/>

Madagascar is a low-income economy. It is a large island and has the highest population of the five ESA countries. Poverty levels are extremely high despite an abundance of natural resources. Poverty negatively affects its social conditions, limiting health, food, education, and housing. Biodiversity is severely degraded, and deforestation is a significant challenge. Moreover, Madagascar is highly vulnerable to climate change impacts.

Mauritius is a small upper-middle-income country whose service industry has grown considerably in the past ten years. Rights to food, housing and health care are at comparatively high levels, as is human development. The country's biodiversity is highly threatened, and despite high readiness, Mauritius remains vulnerable to climate impacts.

Seychelles is a small high-income country island with comparatively high-level human development,⁴⁹ including a high literacy level⁵⁰ and a well-developed housing market. The right to health and food has improved in recent years. Though it has a relatively high readiness level, Seychelles is highly vulnerable to climate change impacts.

Zimbabwe is a lower-middle-income, landlocked country whose economy, social conditions and environment have suffered from political crisis. Rights to food, housing and health are extremely poor. Although about one-quarter of the country has been protected, biodiversity is threatened, and deforestation continues. The country is highly vulnerable to climate change and has a low readiness score.

⁴⁹ Central Bank of Seychelles, Annual Report 2018. Available at: <https://www.cbs.sc/Downloads/publications/Annual%20Report%202018.pdf>.

⁵⁰ World Bank, 'Literacy rate, youth total (% of people ages 15-24) - Comoros, Madagascar, Mauritius, Seychelles, Zimbabwe, World'. Available at <https://data.worldbank.org/indicator/SE.ADT.1524.LT.ZS?end=2019&locations=KM-MG-MU-SC-ZW-1W&start=2013&view=chart>