



United Nations
Economic Commission for Africa



Identifying priority products and value chains for standards harmonization in Africa

Technical Study



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Abbreviations

AMU	Arab Maghreb Union
ARSO	African Organization for Standardization
BEC	broad economic category
CEPII	Centre d'Études Prospectives et d'Informations Internationales (France)
COMESA	Common Market for East and Southern Africa
CTB	contribution to trade balance
EAC	East African Community
ECA	Economic Commission for Africa
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
GDP	gross domestic product
HS	Harmonized Commodity Description and Coding System (Harmonized System)
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
NTBs	non-tariff barriers
PEB	potential export basket
POS	international market position
SADC	Southern African Development Community
TBT	technical barriers to trade
THC	Technical Harmonization Committee
UN Comtrade	United Nations International Trade Statistics Database
WTO	World Trade Organization

Explanatory notes

This study covers six regional economic communities in Africa, namely, the East African Community, the Common Market for East and Southern Africa, the Economic Community of West African States, the Economic Community of Central African States, the Southern Africa Development Community and the Arab Maghreb Union. Other regional economic communities are not included, because of the scarcity of data among the majority of their member States. Given the overlapping membership of African countries in different regional economic communities, it was, however, possible to extract data and thus conduct the analysis for those regional economic communities where at least more than half of the member States had data available.

Exports data used for the analysis were derived from the United Nations International Trade Statistics Database (UN Comtrade). The data were extracted as reported in the system, which incorporates re-exports. In general, this is a weakness of trade-related data. Some of the challenges encountered in aggregating export data may arise from the sourcing of commodities in the local market. Once commodities have been imported and are already in circulation in the domestic market, they will be entered as exports by the exporters who purchase them.

Executive summary

Background

The Agreement Establishing the African Continental Free Trade Area entered into force on 30 May 2019. The operational phase of the Agreement was launched on 7 July 2019 and tariff dismantlement will begin on 1 July 2020. To date, 54 member States of the African Union have signed the Agreement and 30 of these have deposited official instruments of ratification.

The Agreement has the potential to be a game changer for the industrialization of Africa. Through progressively eliminating tariffs and removing non-tariff barriers on intra-African trade and addressing services-related bottlenecks, the Free Trade Area can address the fragmentation of African economies. This will support the creation of a business environment conducive to value addition and the promotion of intra-African trade, in particular in industrial goods. In the light of these benefits, at the outset of negotiations, African policymakers designated industrialization as the central pillar of the African Continental Free Trade Area.

The industrialization and trade potential of the African Continental Free Trade Area, however, cannot be realized without adequate quality infrastructure systems, including metrology, standardization, accreditation, quality management and conformity assessment. Compliance with standards and technical regulations is important for signalling and guaranteeing the quality of produced and traded goods.

The volume and complexity of technical regulations and the variation in certification, testing, inspection practices and standards used by different African countries continue to pose an impediment to intra-African trade. Some progress has been achieved at the level of regional economic communities in harmonizing quality standards, but there still remain significant gaps and efforts by the communities have not been sufficiently coordinated at the continental level. The African Continental Free Trade Area offers a platform for African countries

to cooperate more effectively on quality infrastructure systems in support of the continent's regional integration process, as defined in the 1991 Treaty Establishing the African Economic Community (Abuja Treaty).

To this end, African Governments decided to include technical barriers to trade and sanitary and phytosanitary measures within the scope of the African Continental Free Trade Area. Annexes 6 and 7 to the Agreement detail the commitments of State parties to facilitate trade through cooperation in areas related to technical barriers to trade and sanitary and phytosanitary measures. In particular, they require the elimination of unnecessary and unjustifiable technical barriers to trade through reinforcing international best practices; harmonizing standards and ensuring equivalence in technical regulations, metrology, accreditation and conformity assessment; developing capacity-building programmes for cooperation; and establishing mechanisms and structures to enhance transparency.

The harmonization of standards is a laborious task that requires extensive, costly and lengthy negotiations. As a result, it will not be possible to harmonize all standards at once, and a well-informed and appropriate prioritization strategy will be needed to maximize the impact of standards harmonization in the framework of the African Continental Free Trade Area. This was recognized as an important issue at the twenty-fourth General Assembly of the African Regional Organization for Standardization (ARSO), and reiterated at the twelfth meeting of the Pan-African Quality Infrastructure Joint Committee. In this context, the two bodies requested that the Economic Commission for Africa (ECA), as the ARSO champion for regional value chains, prepare an empirical study to inform the prioritization of standards harmonization on the continent. Since then, ARSO has established a joint advisory group for the regional economic communities to support the continental standards harmonization process. The first meeting of the group was held in November 2019.

The present study was prepared in response to the request by ARSO and the Pan-African Quality Infrastructure and its objectives and methodology are detailed in the following paragraphs. These are followed by a presentation of the trade and standards harmonization status of African regional economic communities and an analysis of the most common exports of each community. The following chapters describe the potential export basket for each region, identifying products for which each regional economic community has a comparative advantage in African markets and which therefore offer an opportunity for expanding intra-African trade. Based on this, the final chapters identify priority value chains in the continent, and subsequently priority products for the harmonization of standards.

Objectives and methodology

The overarching objective of the study is to identify priorities for standards harmonization across Africa to inform implementation of the annexes to the Agreement Establishing the African Continental Free Trade Area on technical barriers to trade and sanitary and phytosanitary measures. The specific objectives are, first, to identify priority African value chains; and, second, to identify priority products for standards harmonization within these value chains.

The analysis covers six regional economic communities, namely, the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Southern African Development Community (SADC) and the Arab Maghreb Union (AMU).

The study employs a framework consisting of a number of techniques to identify priority value chains and products for standards harmonization. The techniques complement one another and are applied at the regional economic community level. These are:

- a) Identification of most commonly traded goods;
- b) Estimation of the potential export basket;

- c) Review of regional economic community industrialization priorities and harmonized standards catalogues.

Identifying the most commonly traded goods among regional trade blocs is a typical technique used to inform priorities for regional standards harmonization, since it is straightforward and relatively easy to apply. This technique helps to guide decisions aimed at expanding and adding value to existing exports.

At the same time, exclusive use of the most commonly traded goods technique would identify priorities for standards harmonization guided purely by existing trade flows, and overlook opportunities to harness under-exploited or untapped potential that could scale up production and intra-African trade. There is an opportunity for African countries to supply exports to other countries on the continent which currently rely on imports originating from outside Africa, in particular in agricultural products. These exports are constrained by tariff and non-tariff trade costs, which may sometimes include costs related to complex and unharmonized standards and technical requirements. The African Continental Free Trade Area is expected to address these constraints and create a range of new opportunities for intra-African trade, in particular in more industrialized products. It is therefore important also to consider more forward-looking techniques that take into account under-exploited potential, and new opportunities opened up by the African Continental Free Trade Area. This is needed to inform a set of dynamic priorities for standards harmonization that may differ quite substantially from existing priorities based on subregional markets and regional economic community groupings.

The concept of comparative advantage offers a framework for identifying potential – or under-exploited – export opportunities. Owing to the considerable difficulty of measuring comparative advantage and its underlying sources, comparative advantage is typically estimated empirically using so-called “revealed” comparative advantage. Revealed comparative advantage, however, only reflects exports, and therefore does not capture and use important information related to imports when estimating comparative advantage. Instead, in the present study estimates are made of the contribu-

tion to trade balance and international market position indicators developed by the Centre d'Études Prospectives et d'Informations Internationales (CEPII). Both the contribution to trade balance and international market position indicators must be positive for a regional economic community j to have a comparative advantage in product i and for that product to be selected for the community's potential export basket.

Industrialization is a central objective of African development policies and frameworks, including Agenda 2063 of the African Union. Most African regional economic communities have identified industrialization priorities based on similarities in geography, natural resources, skill sets and historical comparative advantages or emerging opportunities. For SADC and EAC, industrialization priorities are outlined in standalone industrial strategies. Other communities have identified industrialization-related objectives in various regional strategy, agenda and framework documents. Regional economic communities have also made substantial progress towards harmonizing standards across their regions, offering an important starting point for the process of harmonizing African Continental Free Trade Area standards.

Accordingly, the present study also compares the priorities identified using the most commonly traded goods and potential export basket techniques with the industrialization priorities identified by regional economic communities and the communities' existing harmonized standards catalogues. This additional step is needed to assess whether the two sets of priorities converge; whether any significant gaps may exist in the lists identified through the quantitative-based techniques; and whether the regional economic communities' existing harmonized standards can offer a basis for the harmonization of continental standards.

Key findings

- » A large proportion of African trade takes place with the rest of the world. For all African regional economic communities, more than 60 per cent of exports are destined for markets outside the continent, and more than 80 per cent of imports originate from

outside the continent. Three out of the continent's top four imports from the rest of the world are petroleum products, with values above \$10 billion each. In all, 36.5 per cent of imports to Africa from the rest of the world are processed goods, indicating that Africa is heavily reliant on goods manufactured or processed outside the continent.

- » Intra-African exports amounted to an average of \$70.87 billion for the period 2016–2018. On average, only some 19 per cent of African exports were destined for other African countries, and the majority of these exports were concentrated within a given regional economic community. The African Continental Free Trade Area offers an opportunity for regional economic communities to tap into under-exploited export markets in other African countries outside their regional groupings.
- » Intra-African imports contributed on average even less to total African imports (a mere 14.3 per cent) and, similarly, a large share of these imports originated from within the same community (on average, 49.3 per cent). The African Continental Free Trade Area offers an opportunity for regional economic communities to import inputs and intermediates from African countries outside their region and to develop African regional value chains that are not confined to existing regional groupings. Harmonizing standards and technical regulations across African countries will be crucial to supporting African countries in their efforts to tap into these opportunities.
- » The top exports in Africa are mainly agricultural or mineral products. For all regional economic communities studied, there are overlaps between the products exported within the community, to other countries in Africa and to elsewhere in the world. In addition, on the whole, there is broad convergence between the top ten exports from each regional economic community with their self-identified priorities for industrialization and value chain development.

-
- » All the regional economic communities, with the exception of ECOWAS, have larger potential export baskets to Africa than to the rest of the world, indicating that they are more competitive within the continent than in the rest of the world. All the communities have a comparative advantage in most of their self-identified priority products for industrialization and value addition. Africa has a more diversified comparative advantage within Africa than with the rest of the world, since it is constituted by fewer primary products.

Key recommendations

- » In view of the more diversified and industrialized nature of intra-African trade and its comparative advantage (compared to the trade and comparative advantage of Africa with the rest of the world), implementation of the Agreement Establishing the African Continental Free Trade Area should be fast-tracked and supported by complementary measures to address existing constraints to trade and industrialization.
- » The harmonization of standards across the continent will be crucial to supporting realization of the trade and industrialization potential of the African Continental Free Trade Area, and should therefore be given significant priority in the implementation of the Agreement.
- » The harmonization process should build upon existing international or regional (best practice) standards.
- » The continental standards harmonization process should be based on value chain priorities that are common across regional economic communities and that offer potential for strong forward and backward linkages. According to the potential export basket analysis, these include mineral oils, precious stones, iron and steel and agro-processing. Specific subsectors under agro-processing include tea, sugar, coffee, vegetables, cereals, beverages and spirits.
- » At the product level, the existing standards harmonization catalogues of the various regional economic communities should offer a basis for identifying priority products for standards harmonization at the continental level.
- » The continental standards harmonization process should prioritize products in which at least two regional economic communities have a comparative advantage and for which standards already exist in at least two such communities. According to this approach, priority products for standards harmonization should include Portland cement, fish, milk and milk products, fruits and fruit juices, edible oils such as palm oils, and cereals, including rice, wheat, maize and sorghum.
- » Regional-level programmes should be developed to articulate and promote the implementation of regional value chains. Regional economic communities can enter value chains at different levels and the chains must be well understood in order to facilitate meaningful participation in them.
- » To facilitate the continental standards harmonization process, there is need to update the communities' lists and catalogues of harmonized standards. In particular, use of the harmonized text of these standards would be of considerable assistance in defining the scope and applicability of the standard and ensuring comparability across regional economic communities.

1. Introduction

1.1. Background

Industrialization has gained increasing importance in African development policies and frameworks in recent years. The African Union dedicated the 2008 session of its Assembly of Heads of State and Government to the theme of the industrialization of Africa. It was during that session that the Action Plan for the Accelerated Industrial Development of Africa was adopted, which now serves as the main agenda for the continent's industrialization. In 2010, the Programme for Infrastructure Development in Africa was launched, which is aimed at enhancing cross-border collaboration in the design and implementation of regional energy and transport infrastructure projects. The African Union reaffirmed the continent's commitment to industrialization with its Agenda 2063, calling for the promotion of sectoral and productivity plans and regional and commodity value chains to support the implementation of industrial policies.

The continent's regional economic communities recognize that industrialization needs to take centre stage in regional integration and development agendas. This is reflected in their treaties, protocols, development plans, action plans, policies and regulations.

The African Continental Free Trade Area is expected to provide added impetus to the African industrialization agenda. The Agreement Establishing the African Continental Free Trade Area entered into force on 30 May 2019, the operational phase of the Free Trade Area was launched on 7 July 2019 and tariff dismantlement will begin on 1 July 2020. To date, 54 member States of the African Union have signed the Agreement and 30 of these have deposited official instruments of ratification.

Through progressively eliminating tariffs and removing non-tariff barriers to intra-African trade and clearing services-related bottlenecks, the African Continental Free Trade Area has the potential

to remedy the fragmentation of African economies. This will support the creation of a business environment conducive to value addition and the promotion of intra-African trade. In view of this potential, and the relatively high industrial content of intra-African trade, at the outset of negotiations, African policymakers designated industrialization as the central pillar of the African Continental Free Trade Area. The first and second of the five objectives of the Free Trade Area are:

- » To enhance competitiveness at all levels, specifically at the industry and enterprise levels, through exploiting opportunities for scale economies, reducing business costs, promoting continental and global market access and improving the reallocation of resources, including through the development of trade-related infrastructure.
- » To overcome dependence on exportation of primary products and promote social and economic transformation for inclusive growth, industrialization and sustainable development, in line with Agenda 2063.

The Agreement targets an ambitious liberalization agenda for trade in goods. It will create a single African economic space of potentially 55 African Union member States, comprising more than 1.3 billion people,¹ and with a total gross domestic product (GDP) in excess of \$2.5 trillion. This promises to enable economies of scale, drive competitiveness and attract significant investment into Africa.

The modalities for trade in goods under the Agreement Establishing the African Continental Free Trade Area commit African Union member States to removing at least 90 per cent of the tariff lines on goods imported from other States parties over a period of between 5 and 15 years. This ambitious tariff liberalization agenda is expected to support the development of African regional value chains, since it will boost incentives to source inputs and intermediates from within the continent. The Economic Commission for Africa (ECA) projects that

¹ See UNCTADstat (2020).

the value of intra-African exports will increase by between about 15 per cent (or \$50 billion) and nearly 25 per cent (or \$69.1 billion) by 2040, relative to a baseline without any free trade agreement. Intra-African exports increase the most for industrial products, with gains ranging between some 25 per cent (or \$36.1 billion) and almost 30 per cent (or \$43.3 billion).

The scope of the Agreement moves beyond a traditional free trade agreement, covering not only trade in goods, but also trade in services, investment, intellectual property rights and competition policy. This design reflects the explicit decision of African policymakers to enable trade and investment to support industrialization. The Agreement Establishing the African Continental Free Trade Area also includes provisions to overcome existing challenges to improving Africa's trade and investment environment, including non-tariff barriers, customs cooperation and trade facilitation. These complementary measures will be crucial to boosting industry and enterprise level competitiveness, reducing business costs and expanding market access.

The industrialization and trade potential of the African Continental Free Trade Area, however, cannot be realized without adequate quality infrastructure systems, including metrology, standardization, accreditation, quality management and conformity assessment. Compliance with standards and technical regulations is important for signalling and guaranteeing the quality of produced and traded goods. This helps to encourage trade and industrialization through:

- » Protecting consumers and creating confidence in manufactured and traded goods
- » Enhancing production and trade capacity and competitiveness
- » Facilitating mutually beneficial trade (particularly in industrial products) and the integration of firms into regional and global value chains
- » Improving the efficiency of production and trade
- » Contributing to technology upgrading and absorption

The volume and complexity of technical regulations and the variation in certification, testing, in-

spection practices and standards used by different African countries continue to pose impediments to intra-African trade. Some progress has been achieved at the regional economic community level in harmonizing quality standards, but significant gaps remain and efforts by the regional economic communities have not been sufficiently coordinated at the continental level. The African Continental Free Trade Area offers a platform for African countries to cooperate more effectively on quality infrastructure systems to support the continent's regional integration process, as defined in the 1991 Abuja Treaty.

To this end, African Governments decided to include technical barriers to trade and sanitary and phytosanitary measures within the scope of the Agreement Establishing the African Continental Free Trade Area. Annexes 6 and 7 detail the commitments of State parties to facilitate trade through cooperation in areas related to technical barriers to trade and sanitary and phytosanitary measures. In particular, they require the elimination of unnecessary and unjustifiable technical barriers to trade through reinforcing international best practices; harmonizing standards and ensuring equivalence in technical regulations, metrology, accreditation and conformity assessment; developing capacity building programmes for cooperation; and establishing mechanisms and structures to enhance transparency.

The harmonization of standards is a laborious task that requires comprehensive, costly and lengthy negotiations. As a result, it will not be possible to harmonize all standards at once, and a well-informed and appropriate prioritization strategy will be needed to maximize the impact of standards harmonization in the framework of the African Continental Free Trade Area. This was recognized as an important issue at the twenty-fourth General Assembly of ARSO, and reiterated at the twelfth meeting of the Pan-African Quality Infrastructure Joint Committee. In this context, the two bodies requested that ECA, as the ARSO champion for regional value chains, prepare an empirical study to inform the prioritization of standards harmonization on the continent. Since then, ARSO has established a joint advisory group for the regional economic communities to support the continental

standards harmonization process. The first meeting of the group was held in November 2019.

The present study was prepared in response to the request by ARSO and the Pan-African Quality Infrastructure and its objectives and methodology are detailed in the following paragraphs. These are followed by a presentation of the trade and standards harmonization status of African regional economic communities and an analysis of the most common exports of each community. The following chapters describe the potential export basket for each region, identifying products for which each regional economic community has a comparative advantage in African markets and which therefore offer an opportunity for expanding intra-African trade. Based on this, the final chapters identify priority value chains in the continent, and subsequently priority products for the harmonization of standards.

1.2. Objectives of the study

The overarching objective of the study is to identify priorities for standards harmonization across Africa to inform implementation of the annexes of the

Agreement Establishing the African Continental Free Trade Area on technical barriers to trade and sanitary and phytosanitary measures. The specific objectives are, first, to identify priority African value chains; and, second, to identify priority products for standards harmonization within these value chains.

Because data on trade in services are limited, the analysis is confined to trade in goods. Further efforts to consider the prioritization of harmonizing services and transport standards will, however, also be key to enabling the easy exchange of goods across Africa.

The analysis covers six regional economic communities, namely, the Arab Maghreb Union (AMU), the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC). The membership of these regional economic communities is summarized in table 1 below.

Table 1: Member States of regional economic communities

Member States	
AMU	Algeria, Libya, Mauritania, Morocco, Tunisia
COMESA	Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Eswatini, Seychelles, Tunisia, Uganda, Zambia, Zimbabwe
EAC	Burundi, Kenya, Rwanda, South Sudan, Uganda, United Republic of Tanzania
ECCAS	Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, Sao Tome and Principe
ECOWAS	Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo
SADC	Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Eswatini, United Republic of Tanzania, Zambia, Zimbabwe

1.3. Methodology

The study employs a framework comprising a number of techniques to identify priority value chains and products for standards harmonization. The techniques complement one another and are applied at the regional economic community level. These are:

- a) Identification of most commonly traded goods;
- b) Estimation of the potential export basket;
- c) Review of regional economic community industrialization priorities and harmonized standards catalogues.

The subsequent subsections summarize the framework.

1.3.1 Identification of most commonly traded goods

Identifying the most commonly traded goods among regional trade blocs is a typical technique used to inform priorities for regional standards harmonization, since it is straightforward and relatively easy to apply. For example, the TradeMark East Africa project to support standards harmonization in EAC concentrated on harmonizing standards for the top 20 most commonly traded goods in the EAC region by value. Concentrating standards harmonization on the most commonly traded products can help to facilitate the expansion of existing intraregional trade.

The study applies this technique by comparing the most common exports and imports of the RECs with three trading partner groupings:

- a) Intra-community;
- b) Africa;
- c) Rest of the world.

1.3.2 Estimation of the potential export basket

Relying solely on the most commonly traded goods technique would identify priorities for

standards harmonization guided purely by existing trade flows and overlook opportunities to harness under-exploited or untapped potential that could expand production and intra-African trade. There is an opportunity for African countries to supply exports to other countries on the continent which currently rely on imports originating from outside Africa, in particular in agricultural products. These exports are constrained by tariff and non-tariff trade costs, which may sometimes include costs related to complex and unharmonized standards and technical requirements. The African Continental Free Trade Area is expected to address these constraints and create a range of new opportunities for intra-African trade, in particular in more industrialized products. It is therefore important also to consider more forward-looking techniques that can be used to harness under-exploited potential and new opportunities opened up under the African Continental Free Trade Area. This is needed to inform a set of dynamic priorities for standards harmonization that may differ quite substantially from existing priorities based on subregional markets and regional economic community groupings.

The concept of comparative advantage offers a framework for identifying potential – or under-exploited – export opportunities. A country has a comparative advantage in a commodity if its opportunity costs of production are lower than that of an international competitor. Sources of comparative advantage may include superior technologies, an abundance of primary or intermediate inputs and economies of scale from large operations. The concept of comparative advantage implies that countries should specialize in exporting products in which they have a comparative advantage in producing.

Owing to the considerable difficulty of measuring comparative advantage and its underlying sources, comparative advantage is typically estimated empirically using so-called “revealed” comparative advantage. Following this approach, if a given country exports more than the global average exports of a specific product, then that country will have a revealed comparative advantage in that product. The notion “revealed comparative advantage” only reflects exports, however, and therefore does not capture and use important information related to imports when estimating comparative advantage.

For example, in a situation when a country imports a large part of its exports and performs only minor value addition in terms of the assembly process, “revealed comparative advantage” may not correctly reflect its actual comparative advantage.

Both the contribution to trade balance and international market position indicators must be positive for a regional economic community j to have a comparative advantage in product i and for that product to be selected for the community’s potential export basket.

Instead, in the present study estimates are made of the contribution to trade balance and international market position indicators developed by the Centre d’Études Prospectives et d’Informations Internationales (CEPII).² This technique provides an estimate of comparative advantage which is based on both the exports and the imports of a commodity by a country.

For the purposes of the analysis, the contribution to trade balance (CTB) indicator is determined by the spread between the trade balance of the regional economic community j in product i relative to GDP (y_{ij}) and the global trade balance (y_j), weighted by the share of product i in global trade ($\frac{W_i}{W}$). The study considers two alternative cases where global is either defined as referring to “Africa” or “the world”, in order to facilitate the comparative analysis of potential export opportunities to African markets vis-à-vis the rest of the world. Mathematically:

$$CTB_{ij} = y_{ij} - \left(\frac{W_i}{W}\right) * y_j$$

Where

$$W_i = \sum_i (X_i + M_i)$$

$$W = \sum_i \sum_j (X_{ij} + M_{ij})$$

$$y_j = 1000 * \frac{X_j - M_j}{GDP_j}$$

The CTB indicator can be more intuitively represented as:

$$CTB_{ij} = 1000 * \left(\frac{W_i}{GDP_j}\right) * \left[\frac{(X_{ij} - M_{ij})}{W_i} - \frac{(X_j - M_j)}{W}\right]$$

The first part of this equation measures the international market position (POS) or the international competitiveness of regional economic community j in product i . It is possible for the value of the CTB to be positive even if the value of the POS is negative. Both the CTB and the POS must be positive for regional economic community j to have a comparative advantage in product i and be selected for the potential export basket (PEB) of the regional economic community. The PEB was calculated for all regional economic communities for the two alternative scenarios, where “global” is defined either as Africa or as the world, in order to identify products with high potential for intra-African trade versus products with high potential for trade to the rest of the world.

The advantages of the approach include:

- » The CTB indicator more accurately reflects comparative advantage in a product than regional comparative advantage indicators since it is based both on imports and on exports.
- » The PEB identifies under-exploited trade opportunities at the continental level, for which the African Continental Free Trade Area is expected to provide a supportive environment for African countries.
- » The PEB can also identify potential trade opportunities to the rest of the world, which can be compared to those identified for the African market in terms of sector, sophistication of products and diversification.

The analysis is based on data at the six-digit level of the Harmonized Commodity Description and Coding System (Harmonized), except where otherwise indicated. Data from UN Comtrade are used for the years 2016, 2017 and 2018. For ECCAS, however, the data used relate to the years 2015, 2016 and 2017, owing to the non-availability of 2018 data at the time of analysis.

2 For more information on the application of the CTB indicator, see Banga, Kumar and Cobbina, 2014.

1.3.3 Review of regional economic community industrialization priorities and harmonized standards catalogues

Industrialization is a central objective of African development policies and frameworks, including Agenda 2063. Most African regional economic communities have identified industrialization priorities based on similarities in geography, natural resources, skill-sets and historical comparative advantages or emerging opportunities. These priorities can help to support the collective action needed to leverage abundant resources and comparative advantages to unlock regional potential and surmount obstacles to intraregional trade and industrialization.

For SADC and EAC, industrialization priorities are outlined in stand-alone industrial strategies. Other regional economic communities have identified in-

dustrialization-related objectives in other regional strategy, agenda and framework documents.³

The regional economic communities have also made considerable progress towards harmonizing standards across their regions, which offers an important starting point for the African Continental Free Trade Area standards harmonization process.

In this study, a comparison is made of the priorities identified using the most commonly traded goods and potential export basket techniques with the industrialization priorities identified by regional economic communities and the communities' existing harmonized standards catalogues. This additional step is needed to assess whether the two sets of priorities converge, whether any important gaps may exist in the lists identified through the quantitative-based techniques, and whether existing regional economic community harmonized standards can offer a basis for continental standards harmonization.

³ For example, see the COMESA Industrialization Strategy (2017–2026), COMESA Secretariat, Lusaka; the West Africa Common Industrial Policy Implementation Strategy 2015–2020, ECOWAS Commission, Abuja; the 2018 List of SADC Harmonized Texts, SADC Secretariat, Gaborone.

2. Setting the context: trade and standards in African regional economic communities

2.1. Production and Trade performance

The annual average global GDP for the period 2016–2018 stood at \$79.59 trillion. The average GDP of Africa was \$2.26 trillion for the same period, representing only 2.8 per cent of global GDP. This low share reflects production constraints on the continent such as weak productive capacities and inadequate infrastructure. All six of the regional economic communities covered by this study registered increasing GDP levels from the year 2000 (table 2). COMESA contributed the largest share to total African GDP (27.8 per cent), followed by ECOWAS (25.3 per cent), SADC (20.0 per cent), AMU (15.5 per cent), ECCAS (11.4 per cent) and EAC (7.6 per cent).

The continent's total trade in goods (imports and exports) was valued at \$917.7 billion on average for the years 2016–2018. Its exports and imports contributed only 2.3 per cent and 2.8 per cent of global exports and imports respectively, indicating a very low level of African engagement in global trade. Low engagement is driven by a number of impediments to African trade, including high trade costs, heavy commodity dependence, weak pro-

ductive capacities and a disadvantaged position in the global trade regime (Sommer and Luke, 2016).

The figures below summarize the performance of trade for each of the six regional economic communities at the intra-community, intra-African and rest of the world levels. The trends are notably different for each community, reflecting regional differences in political and economic developments and their varying exposure to particular shocks.

For example, the AMU region experienced decreasing trade within the regional economic community and with Africa, while trade with the world increased (figure 1). COMESA registered increasing trade with the world, within Africa and also within COMESA, with the exception of a dip in intra-COMESA exports in 2018 (figure 2). EAC experienced a slight decrease in exports to all three destinations, while imports were increasing (figure 3). For countries with data in the ECCAS region, intra-ECCAS trade decreased between 2015 and 2016, but sharply increased in 2017. On the other hand, ECCAS trade with Africa and the world decreased in 2016, but rebounded in 2017 (figure 4). While trade in ECOWAS (figure 5) and SADC (figure 6) both increased, intra-ECOWAS trade and trade within Africa decreased in 2018.

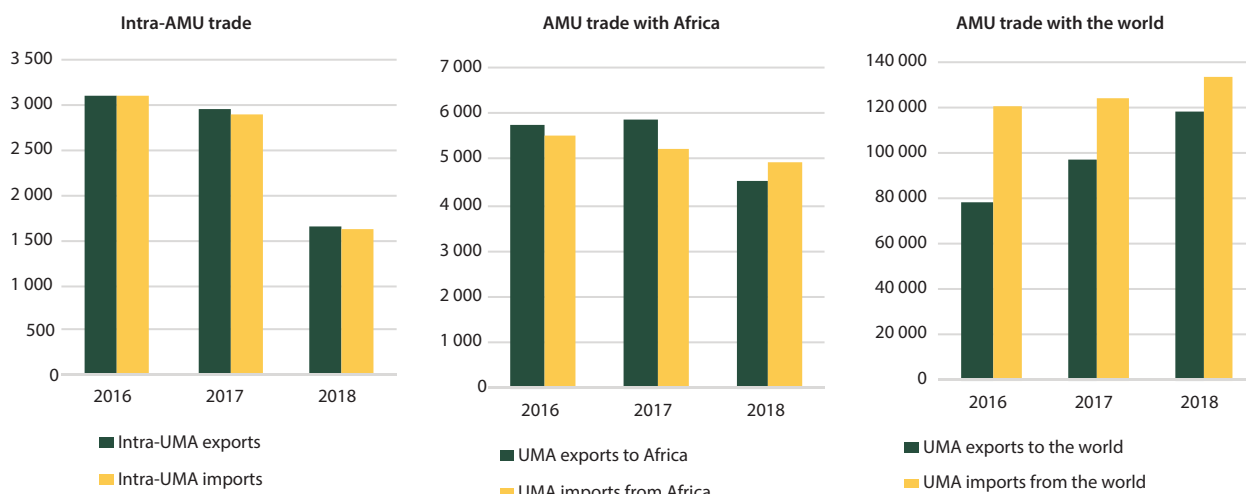
Table 2: GDP of the regional economic communities (billions of United States dollars at current prices)

	2000	2005	2010	2015	Average (2016–2018)	% share of total African GDP (2016–2018 average)
AMU	154.68	247.33	377.59	343.00	349.49	15.5%
COMESA	202.15	223.53	478.36	643.68	625.74	27.8%
EAC	31.69	48.38	99.40	159.03	171.31	7.6%
ECCAS*	52.54	102.57	194.82	245.37	257.01	11.4%
ECOWAS	108.71	244.89	487.30	664.60	569.83	25.3%
SADC	213.49	383.81	613.03	635.96	450.52	20.0%

*ECCAS average data are for the years 2015–2017.

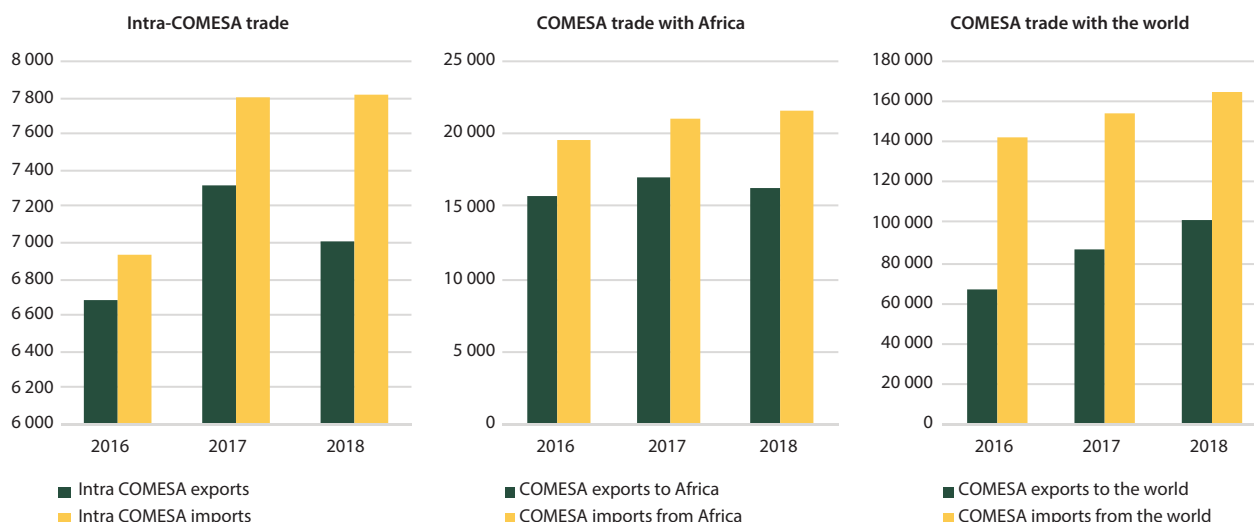
Source: ECA calculations based on World Trade Institute data.

Figure 1: Trends in AMU trade (millions of United States dollars)



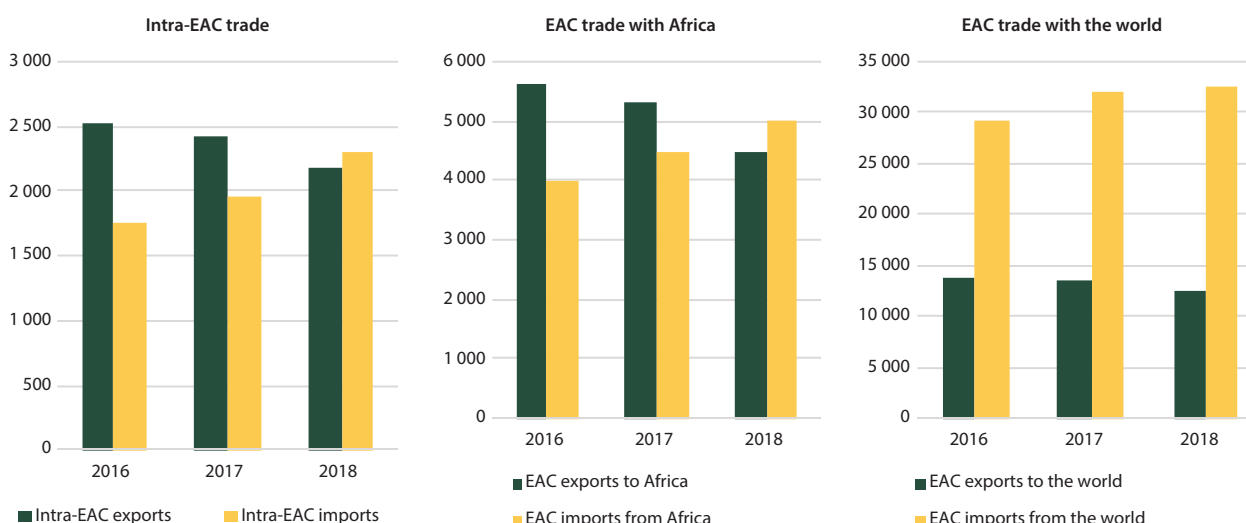
Source: ECA calculations based in UN Comtrade data.

Figure 2: Trends in COMESA trade (millions of United States dollars)



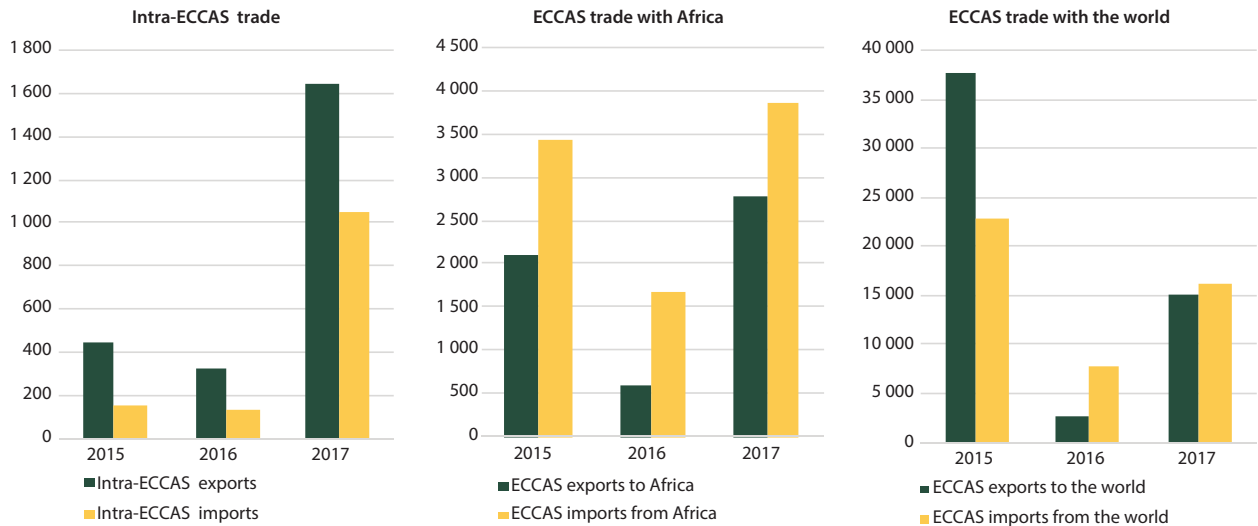
Source: ECA calculations based in UN Comtrade data.

Figure 3: Trends in EAC trade, in million US\$



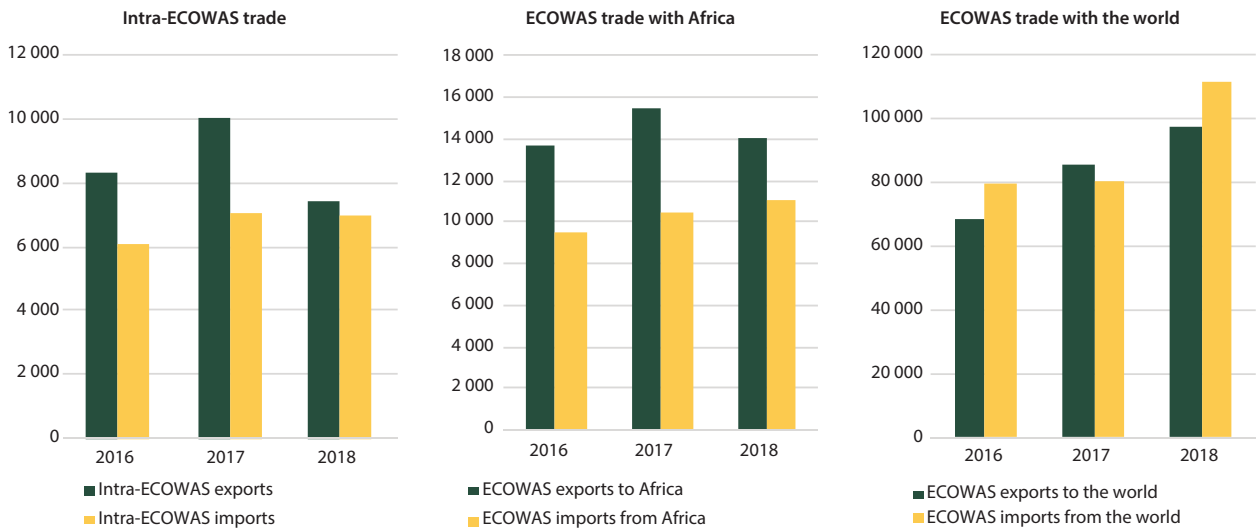
Source: ECA calculations based in UN Comtrade data.

Figure 4: Trends in ECCAS trade (millions of United States dollars)



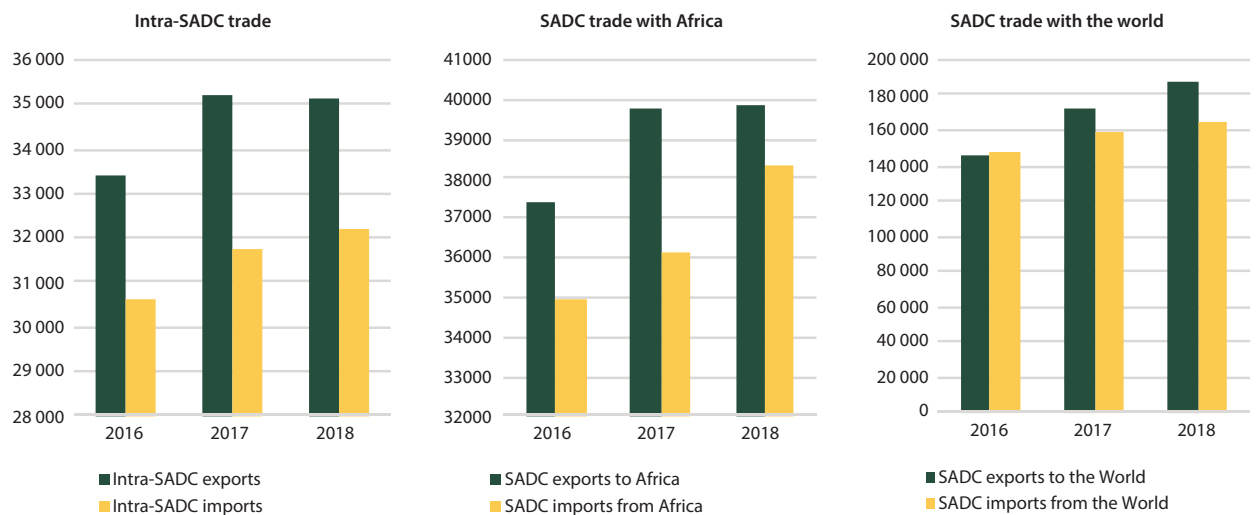
Source: ECA calculations based in UN Comtrade data.

Figure 5: Trends in ECOWAS trade (millions of United States dollars)



Source: ECA calculations based in UN Comtrade data.

Figure 6: Trends in SADC trade (millions of United States dollars)



Source: ECA calculations based in UN Comtrade data.

A large proportion of African trade takes place with the rest of the world. For all African regional economic communities, more than 60 per cent of exports are destined for markets outside the continent, and more than 80 per cent of imports originate from outside the continent. The remaining share of trade is split between trade within the regional economic communities and trade with the rest of Africa. Three out of the top four African imports from the world are petroleum products,⁴ with values above \$10 billion each. 36.5 per cent of all African imports from the world are processed goods, indicating that Africa is reliant on goods manufactured or processed outside the continent.

Table 3 provides a summary of the shares of intra-African and intra-community trade. Intra-African exports amounted to an average of \$70.87 billion for the period 2016–2018. On average, only some 19 per cent of African exports were destined for other African countries, and the majority of these exports were intra-community (on average 54.9 per cent). COMESA, EAC and SADC had shares of exports to Africa above the average (19.2 per cent, 38.8 per cent and 23.2 per cent respectively). ECOWAS and SADC exports to Africa are particularly concentrated within their regional economic community, with intra-community exports as a share of total exports to Africa accounting for 59.8 per cent and 88.9 per cent respectively. The African Continental Free Trade Area offers an opportuni-

ty for regional economic communities to tap into under-exploited export markets in other African countries outside their regional groupings.

Intra-African imports contributed on average even less to total African imports (only 14.3 per cent), and similarly, a large share of these imports originated from within the same community (on average 49.3 per cent). EAC, ECCAS and SADC had shares of imports from Africa above the average (14.4 per cent, 19.2 per cent and 23.2 per cent respectively). Again, ECOWAS and SADC African imports were the most concentrated within their regional economic communities, with intra-community imports as a share of total imports from within Africa accounting for 64.8 and 86.4 per cent respectively. This indicates that African countries are not taking full advantage of African markets outside the communities of which they are members. The African Continental Free Trade Area offers an opportunity for African countries to tap into unexploited or under-exploited markers within the continent, and also for regional economic communities to tap into import inputs and intermediates from African countries outside their own community, and develop African regional value chains that are not confined to existing regional groupings. Harmonizing standards and technical regulations across African countries will be crucial to supporting African countries in their efforts to tap into these opportunities.

Table 3: Shares of intra-African and intra-community trade, 2016–2018 average

	Exports to Africa (% total exports)	Intra-community exports (% of exports to Africa)	Imports from Africa (% total imports)	Intra-community imports (% imports from Africa)
AMU	5.5	47.8	4.2	48.7
COMESA	19.2	43	13.6	36.2
EAC	38.8	46.2	14.4	44.6
ECCAS*	9.9	44.1	19.2	15
ECOWAS	17.2	59.8	11.4	64.8
SADC	23.2	88.6	23.2	86.4
Average	18.96	54.91	14.33	49.28

* ECCAS average data are for the years 2015–2017.

Source: ECA calculations based on UN Comtrade data.

4 These are medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel; light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume; and petroleum oils and oils obtained from bituminous minerals, crude.

2.2. Standards harmonization

2.2.1 Regional economic community quality standards

Four of the six regional economic communities analysed in this study have harmonized regional standards. These are:

- » 2007 consolidated list of COMESA harmonized standards⁵
- » 2018 catalogue of East African standards
- » 2017 list of harmonized standards in ECOWAS⁶
- » 2018 list of SADC harmonized texts⁷

Boxes 1, 2, 3 and 4 below summarize these catalogue texts of harmonized standards. AMU and EC-CAS do not have harmonized standards.

Box 1: Cross-section of consolidated list of COMESA harmonized standards

Title of the standard	COMESA ref. No.	Base standard
Certain pulses	CHS 5:2004	CODEX STAN 171: 1989 (Rev. 1 - 1995)
Sugars	CHS 6:2004	CODEX STAN 212: 1999 (Amd. 1-2001)
Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	CHS 7:2004	CODEX STAN 165: 1989 (Rev. 1 - 1995)
Named vegetable oils	CHS 20:2004	CODEX STAN 210- 1999
COMESA standard for canned mangoes	CHS 22: 2005	CODEX STAN 159:1987
Recommended COMESA code of hygienic practice for processed meat and poultry products	CHS 24: 2005	CAC/RCP 13:1976
Recommended COMESA code of practice — general principles of food hygiene	CHS 81:2005	CAC/RCP 1-1969, Rev. 4-2003
COMESA general standard for the labelling of prepackaged foods	CHS 83:2005	CODEX STAN 1-1985 (Rev. 1-1991)
Recommended methods of analysis for pesticide residues	CHS 86:2005	CODEX STAN 229
Principles for the establishment and application of microbiological criteria for foods	CHS 87:2005	CAC/GL 21 – 1997

Source: COMESA.

5 Consolidated List of COMESA Harmonized Standards, COMESA Secretariat, Lusaka.

6 List of Standards Harmonized in ECOWAS in 2017, ECOWAS Commission, Abuja.

7 2018 List of SADC Harmonized Texts, SADC Secretariat, Gaborone.

Box 2: Cross-section of EAC standards catalogue, 2018

EAS 155-1: 2000, Cotton yarns — Specification — Part 1: Grading by appearance

This East African Standard specification describes methods for grading of cotton yarns by appearance. This standard specification applies to single spun grey cotton yarns. It does not apply to single spun slub yarns or piled yarns.

ICS 59.080.20 HS 5205; HS 5206; HS 5207

EAS 57-1: 2000, Groundnuts (peanuts) — Specification — Part 1: Raw groundnuts for table use and for oil milling

This part 1 of East African Standard prescribes the requirements, grading and methods of test for shelled groundnut kernels.

ICS 67.080.10 HS 1202.10.00 (In-shell); HS 1202.20.00(shelled) 4 pages

EAS 377-1: 2013, Cosmetics and cosmetic products — Part 1: List of substances prohibited in cosmetic products

This East African Standard prescribes the chemical name, state and formulation under which specific use as substance, is prohibited in the cosmetic products. This East African Standard applies only to cosmetic products and not to medicinal products, medical devices or biocidal products.

ICS 71.100.70 HS 3302; HS 3303; HS 3304; HS 3305; HS 3306; HS 3307 9 pages

EAS 18-1-2017, Cement — Part 1: Composition, specification and conformity criteria for common cement (2nd edition)

This East African Standard gives the specifications which include mechanical, physical and chemical requirements of 27 distinct common cements, seven sulphate resisting common cements and three distinct low early strength blast furnace cements and two sulphate-resisting low early strength blast cements and their constituents. This East African Standard also gives strength classes and durability requirements of cements and states their conformity criteria.

ICS 91.100.10 HS 2523.00.00 26 pages

EAS 62-1:2017, Fish handling and processing — Code of practice — Part 1: Fresh fish

This East African Standard provides guidelines for the handling and processing of fresh fish intended for human consumption.

ICS 67.120.30 HS 0302.00.00; HS 0303.00.00; HS 0304.00.00; HS 0305.00.00; HS 0306.00.00; HS 0307.00.00 5 pages

Source: EAC, 2018.

Box 3: Cross-section of list of standards harmonized in ECOWAS in 2017

THC1 – Agricultural products

- 1) ECOSTAND 030:2017 - Specification for peanuts
- 2) ECOSTAND 072:2017 - Code of practice for production and handling of fresh cassava

THC2 – Food products

- 3) ECOTAND 55:2017 – Fortified sugars – specification
- 4) ECOWAS FDHS 56:2017 – Salted fish and dried salted fish of the Gadidae family of fishes – specification
- 5) ECOSTAND 57:2017 – General guidelines on sampling
- 6) ECOSTAND 65:2017 – Maize flour – specification

THC3 – Chemical Products

- 7) ECOSTAND 276 Paints and varnishes – specification for powdered cement paint
- 8) ECOSTAND 795 Paints and varnishes – specification for lacquer thinner
- 9) ECOSTAND 797 Paints and varnishes – specification for nitrocellulose lacquer
- 10) ECOSTAND 042 Paints and varnishes – specification for varnishes

THC4 – Building and construction material

- 11) ECOSTAND 069-2: 2017 – Cement – part 2: conformity assessment
- 12) ECOSTAND 070-2: 2017 – Steel for reinforcement of concrete – part 2: weldable plain bars
- 13) ECOSTAND 073-1: 2017 – Compressed earth blocks - standard terminology
- 14) ECOSTAND 074: 2017 – Building and construction materials: specification for blocks - part 1- precast sandcrete blocks

THC5 – Electrotechnical products

- 15) ECOSTAND 071-1 – Minimum energy performance standards (MEPS) – part 1 - refrigerating appliances
- 16) ECOSTAND 071-2 – Minimum energy performance standards (MEPS) – part 2 – air-conditioning products

Source: ECOWAS, 2017.

Box 4: Cross-section of 2018 list of SADC harmonized texts

SADCSTAN HT 1/BOS 27

Concrete masonry units

SADCSTAN HT 5/SANS 50197-1: 2000 Ed 1 -

Cement part 1: Composition, specifications and conformity criteria for common cements

SADCSTAN HT 6/VC 8036: 1999 Ed 2

Compulsory specification for the safety for moulded-case circuit breakers

SADCSTAN HT 15/VC 8020: 1999 Ed 2

Frozen lobster/products

SADCSTAN HT 28/SANS 1519-1: 1997 Ed 2

Road signs part 1: Retro-reflective sheeting material

SADCSTAN HT 32/SANS 1129: 2002 Ed 1.03

Steel door frames

SADCSTAN HT 62/IEC 60335-280:2004 Ed 2.01

Household and similar electrical appliances – safety part 2-80: particular requirements for fans

SADCSTAN HT 70/SANS 20054:2007 Ed 1

Pneumatic tyres for commercial vehicles and their trailers

SADCSTAN HT 63/ISO 9000:2000 Ed 2

Quality management systems – Fundamentals and vocabulary

SADC HT 82: 2017

Fresh fish and chilled fish

SADC HT 88: 2017

Good aquaculture practices (GAP) for bream (*Tilapia/Oreochromis*)

SADC ARSO HT 98: 2018

African traditional medicine – Good manufacturing practices (GMP) for herbal medicines

Source: SADC, 2018.

The catalogues for harmonized standards at the community level are based on the priorities and common intra-community trade flows for each region. All harmonized standards for the COMESA region are agriculture and food-related such as sugars, vegetable oils and food hygiene. EAC, ECOWAS and SADC also have harmonized standards for industrialized products such as cosmetics, cement, chemical products and electronic appliances. With the exception of the catalogue of East African standards, the others are lists which only broadly indicate the product to which a standard applies. In some cases, it is therefore difficult to identify all products to which the standards apply. The EAC catalogue also provides details of the relevant Harmonized System codes for the products.

Despite the progress made in harmonizing standards and coordinating quality policy at the region-

al economic community level, significant gaps still remain and efforts by the regional economic communities have not been sufficiently harmonized at the continental level. The African Continental Free Trade Area is expected to provide a platform for expanding the number of standards harmonized at the regional economic community and continental levels, and ensuring consistency between the categorization of harmonized standards (including the use of Harmonized System codes) for the purposes of standardization and comparability.

The regional economic communities serve as the building blocks for the African Continental Free Trade Area and will continue to play a crucial role in African standards. In particular, they already have experience, capacities and knowledge in the area of standards, which can provide important inputs to continental harmonization under the Af-

frican Continental Free Trade Area. Existing efforts to harmonize standards at the regional economic community level will also reduce the complexity of the continental harmonization task, and lessons drawn from what has worked well at the community level can provide important insights for the development of a prioritization strategy for standards harmonization at the continental level.

2.2.2 African regional standards

African regional standards already exist and these provide a basis for advancing standards harmonization in the context of the African Continental Free Trade Area. The African regional standards agenda has been spearheaded by ARSO, an intergovernmental standards body established in 1977 by ECA and the Organization for African Unity. The core mandate of ARSO is to generate tools for standards development, the harmonization of standards and conformity assessment and the effective implementation of these systems to enhance the continent's internal and external trading capacity and competitiveness. To date, ARSO has provided the main anchor for coordination, joint action and harmonization on standards on the continent. National standards bodies underpin the ownership of ARSO. There are currently 38 member States of ARSO represented by their national standards bodies, and Zanzibar is an observer member. ARSO therefore offers a natural platform for accelerating nationally-owned standards harmonization under the African Continental Free Trade Area.

A total of 1,353 standards have been harmonized across Africa with the support of ARSO (table 4). Most of these apply to agriculture and food products, building and civil engineering, chemistry and chemical engineering, and leather and textile products. African regional standards are harmonized upon request by member States through technical committees consisting of experts nominated by those States. The African Standards Harmonization Model is based, first and foremost, on the Code of good practice for standardization, developed by the International Organization for Standardization (ISO) and the International Electrotechnical Com-

mission (IEC) as ISO/IEC Guide 59:1994, which was later replaced by the ISO/IEC Guide 59:2019, on ISE and IEC recommended practices for standardization by national bodies, adopted by the World Trade Organization (WTO) in annex 3 to its Technical Barriers to Trade Agreement, and, second, on good practices outlined in regional economic community and Africa-wide treaties. Similarly, the mechanisms for the adoption of African standards follow ISO/IEC Guides 21-1:2005 and 21-2:2005, on the regional or national adoption of international standards and other international deliverables. The national adoption of African standards follows all of the forms recognized internationally.

Technological and enforcement capacities differ across African countries, sometimes rendering it difficult to ensure that adopted standards are actually implemented. African countries should strengthen their efforts to share technological capabilities across borders, an approach which has worked well in the European Union single market. The adoption of the standards does not necessarily have to be enforced as long as trade instruments incentivize their use, for example by exempting products that comply with the relevant African regional standard from multiple testing and inspections, and also anchoring mutual recognition on the African regional standards.

In order to translate the efforts of continental standards harmonization into real and measurable impact on the ground, it will be important for adoption and implementation to be stepped up under the African Continental Free Trade Area. Member States are the process owners in the harmonization of standards and conformity assessment at both the regional economic community and African Union levels. Regional economic communities can play an important role in advocating the adoption and incorporation into domestic frameworks of African harmonized standards at the member State level. They can also contribute to the institutional structure under the African Continental Free Trade Area for standards harmonization through coordinating implementation at the regional level.

Table 4: Number of harmonized African standards by category and broad subject area

Technical Harmonization Committee	No. of standards published	Products -- goods	Tests, sampling, services	Codes, glossaries, units
THC 01, Basic and general standards	134	60	22	52
THC 02, Agriculture and food products	345	175	100	70
THC 03, Building and civil engineering	278	95	168	15
THC 04, Mechanical engineering and metallurgy	108	48	50	5
THC 05, Chemistry and chemical engineering	165	60	103	2
THC 06, Electrotechnology	64	20	30	14
THC 07, Leather and textile products	157	75	78	4
THC 08, Transport and communications	24	5	19	0
THC 09, Environmental management	63	0	63	0
THC 10, Energy and natural resources	3	0	3	0
THC 11, Quality management systems	6	0	6	0
THC 12-1 Cosmetology	0	-	0	0
THC 12-2 Financial services	1	0	1	0
THC 13, African traditional medicine	10	4	0	6
Total	1,353	542	643	168

Source: ARSO.

2.3. Top traded products within each regional economic community

2.3.1 Arab Maghreb Union

Unlike the other regional economic communities, the top exports from AMU are largely processed or manufactured products, with the exception of a few agricultural products such as maize oil, sugar and dates. These latter are mainly exported within ECCAS and to Africa, and have some value added, suggesting the existence of agricultural regional value chains.

Generally, there is little overlap in exports to AMU, Africa and the world. Common exports to all three

destinations are primarily gas and oil products, including natural gas in gaseous state; medium oils and preparations of petroleum or bituminous minerals; and liquefied propane (table 5). In all cases, more than 80 per cent of exports of these products are destined for the world market. Among the top exports are motor cars and other motor vehicles principally designed for the transport of persons, which are exported to Africa and to the world. The ability of the region to export motor vehicles suggests that it has the potential to scale higher rungs of the global automobile value chain. A comparison of the top AMU exports with the region's priorities was not possible because of the non-availability of the AMU industrialization strategy.

Table 5: Top 10 AMU exports, 2016–2018 average (millions of United states dollars)

HS 6	Product description	Destination		
		AMU	Africa	World
030319	Frozen salmonidae (excluding trout and Pacific, Atlantic and Danube salmon)		161.97	
080410	Fresh or dried dates	72.03		
151529	Maize oil and fractions thereof, whether or not refined, but not chemically modified	42.44		
160413	Prepared or preserved sardines, sardinella and brisling or sprats, whole or in pieces		200.95	
170199	Cane or beet sugar and chemically pure sucrose, in solid form	77.09	159.22	
270900	Petroleum oils and oils obtained from bituminous minerals, crude			30,307.42
271012	Light oils and preparations, of petroleum or bituminous minerals which >= 90% by volume			4,127.84
271019	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel	41.97	84.58	3,486.26
271111	Natural gas, liquefied			3,102.58
271112	Propane, liquefied	30.55	128.96	1,726.51
271113	Butanes, liquefied (excluding of a purity of >= 95% of N-butane or isobutane)	300.57	518.83	
271121	Natural gas in gaseous state	558.23	558.23	8,153.56
310520	Mineral or chemical fertilisers containing the three fertilising elements		219.28	
310559	Mineral or chemical fertilisers containing the two fertilising elements		196.08	
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes			1,578.09
843143	Parts for boring or sinking machinery of subheading 8430.41 or 8430.49, n.e.s.	26.60		
854430	Ignition wiring sets and other wiring sets for vehicles, aircraft or ships			2,274.27
854442	Electric conductors for a voltage <= 1.000 V, insulated, fitted with connectors, n.e.s.			1,449.57
854449	Electric conductors, for a voltage <= 1.000 V, insulated, not fitted with connectors, n.e.s.	24.02		
870322	Motor cars and other motor vehicles principally designed for the transport of persons			1,732.47
870323	Motor cars and other motor vehicles principally designed for the transport of persons		93.16	
961900	Sanitary towels (pads) and tampons, napkins and napkin liners for babies, and similar articles	35.56		

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

n.e.s.: not elsewhere specified.

2.3.2 Common Market for Eastern and Southern Africa

The major exports from COMESA to other countries within the region, to Africa and to the world are primary agricultural products and mineral products. There is some overlap in common COMESA exports to all three destinations, though only black fermented tea and partly fermented tea are common to all three destinations (table 6). Common exports to COMESA and Africa are copper ores and concentrates, mixtures of odoriferous substances and mixtures, cobalt oxides and hydroxides, and cane or beet sugar and chemically pure sucrose. Some products feature in the top ten exports to Africa and not the top ten exports to the world, such as

sugar, nickel ores and concentrates, and mixtures of odoriferous substances and mixtures.

With the exception of Portland cement, which is a top export only to COMESA, all other top exports are either primary products or at low levels of their respective value chains. In COMESA the self-identified priorities for value chain development include automobiles, dairy, sugar, beef, cereals, pharmaceuticals, leather, minerals and chemicals. Most of these priorities for value chain development are currently not reflected in the top exports of COMESA, with the exception of minerals beneficiation, maize (cereals) and sugar. There is therefore an opportunity to scale up the production and export of these goods.

Table 6: Top 10 COMESA exports, 2016–2018 average (millions of United States dollars)

HS 6	Product description	Destination		
		COMESA	Africa	World
090111	Coffee (excluding roasted and decaffeinated)			1 613.00
090240	Black fermented tea and partly fermented tea	297.91	387.31	1 480.74
100510	Maize seed for sowing (P)	91.27		
170199	Cane or beet sugar and chemically pure sucrose (P)	121.48	255.36	
240120	Tobacco, partly or wholly stemmed or stripped, otherwise unmanufactured		881.15	1 440.24
252329	Portland cement (excluding white) (P)	138.97		
260300	Copper ores and concentrates (P)	834.50	838.63	
260400	Nickel ores and concentrates (P)		336.92	
260500	Cobalt ores and concentrates (P)	157.76		
270900	Petroleum oils and oils obtained from bituminous minerals, crude			18 174.19
271019	Medium oils and preparations	131.95		
280700	Sulphuric acid; oleum	94.99		
282200	Cobalt oxides and hydroxides; commercial cobalt oxides (P)	324.63	353.50	
330210	Mixtures of odoriferous substances and mixtures	89.57	575.86	
710812	Gold, incl. gold plated with platinum, unwrought (P)			3 845.58
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms (P)		815.06	1 729.04
720241	Ferro-chromium, containing by weight > 4% of carbon (P)		213.10	
740200	Copper, unrefined; copper anodes for electrolytic refining (P)			3 479.15
740311	Copper, refined, in the form of cathodes and sections of cathodes (P)			4 524.45
810520	Cobalt mattes and other intermediate products of cobalt (P)			2 192.56
999999	Commodities not elsewhere specified		602.35	2 356.59

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

2.3.3 East African Community

Similar to COMESA, the top ten EAC exports to EAC, Africa and the world are a mix of primary agricultural products and minerals (table 7). In addition, however, there are also some manufactured products among the top EAC exports, mainly consisting of cement and pharmaceutical products. Common exports to all three destinations are black fermented tea and partly fermented tea, and medium oils and preparations of petroleum or bituminous minerals. Common exports to Africa and the world are unwrought gold and coffee. Common exports to Africa and EAC are maize, medicaments consisting of mixed or unmixed products, and Portland cement.

There is some convergence between the most common EAC exports and the community's strategic sectors outlined in the EAC industrialization strategy (EAC, 2012). For example, pharmaceuticals, energy, minerals processing, agroprocessing and petrochemicals feature in EAC common exports. Ores, minerals and agricultural products included in EAC common exports offer potential for adding value through processing, as called for in the community's industrialization strategy. Cement is a common export of EAC and is key to construction and industrialization, but is not included in the community's strategic sectors.

Table 7: Top 10 EAC exports, 2016–2018 average (millions of United states dollars)

HS 6	Product description	Destination		
		EAC	Africa	World
060311	Fresh cut roses and buds			506.58
071339	Dried, shelled beans "Vigna and Phaseolus"	44.81		
080131	Fresh or dried cashew nuts, in shell			323.77
090111	Coffee (excluding roasted and decaffeinated) (P)		112.75	923.57
090240	Black fermented tea and partly fermented tea (P)	97.91	357.44	1 422.84
100510	Maize seed for sowing	69.63	81.48	
151190	Palm oil and its fractions, whether or not refined (P)		75.90	
230610	Oilcake and other solid residues (P)	54.58		
240110	Tobacco, unstemmed or unstripped	46.82		
240120	Tobacco, partly or wholly stemmed or stripped (P)			316.68
240220	Cigarettes, containing tobacco		78.20	
252329	Portland cement (excluding white)		94.38	
252329	Portland cement (excluding white)	50.82		
261690	Precious-metal ores and concentrates (P)			128.37
271019	Medium oils and preparations (P)	83.99	152.83	314.77
271600	Electrical energy (P)	40.16		
300490	Medicaments consisting of mixed or unmixed products (P)	72.15	108.50	
701090	Carboys, bottles, flasks, jars, pots, phials containers		90.49	
710812	Gold, incl. gold plated with platinum, unwrought (P)		658.93	1 718.08
710813	Gold, incl. gold plated with platinum, semi-manufactured (P)			448.74
999999	Commodities not elsewhere specified			180.64

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

2.3.4 Economic Community of Central African States

In addition to some agricultural and mineral products, the top exports from ECCAS also include industrial products, specifically in the form of ships, boats and floating structures (table 8). These industrial products – namely, vessels for the transport of goods and persons; floating or submersible drilling or production platforms; and light-vessels, fire-floats, floating cranes and other vessels – are common exports to ECCAS, Africa and the world. Crude petroleum oils and oils obtained from bituminous minerals are common exports to both Africa and the world. By comparison, other petroleum exports, such as light oil and medium oils, are processed products and are common only to ECCAS

and Africa. These have potential for value addition and industrialization at the regional level.

According to the strategic outlook paper adopted by ECCAS in 2007 and known as Vision 2025,⁸ the region is focused on promoting and strengthening cooperation, along with balanced and self-sustaining development in various areas, including industry, energy, agriculture and natural resources. There is some convergence between the top exports by ECCAS and the areas of focus identified in the region's vision document. In terms of agriculture, there is convergence with the inclusion of tea, wheat, cocoa and cotton in the top exports. There is, however, more convergence with the natural resources priority, in the form of woods, diamonds, petroleum and iron and steel.

⁸ See ECCAS, Vision Stratégique de la CEEAC à l'horizon 2025, Thirteenth Conference of ECCAS Heads of State and Government (Brazzaville, October 2017).

Table 8: Top 10 ECCAS exports, 2015–2017 average (millions of United States dollars)

HS 6	Product description	Destination		
		ECCAS	Africa	World
090240	Black fermented tea and partly fermented tea (P)		43.58	
110100	Wheat or meslin flour (P)	15.69		
180100	Cocoa beans, whole or broken, raw or roasted (P)			747.86
270740	Naphthalene containing > 50% of naphthalene (P)			167.06
270900	Petroleum oils and oils obtained from bituminous minerals, crude (P)		464.60	13,070.04
271012	Light oils and preparations, of petroleum or bituminous minerals, >= 90% vol (P)	48.69	70.55	
271019	Medium oils and preparations (P)	32.77	66.01	
340119	Soap and organic surface-active products and preparations	49.11	62.32	
440349	Tropical wood, rough (P)			261.48
440729	Tropical wood, sawn or chipped lengthwise, sliced (P)			234.50
520100	Cotton, neither carded nor combed (P)			214.63
701090	Carboys, bottles, flasks, jars, pots, phials containers	19.07		
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted (P)			365.61
721420	Bars and rods, of iron or non-alloy steel, with deformations (P)	15.79	21.43	
890190	Vessels for the transport of goods and for the transport of persons and goods	134.72	308.09	423.21
890400	Tugs and pusher craft	47.18	48.28	
890520	Floating or submersible drilling or production platforms	114.46	44.63	397.85
890590	Light-vessels, fire-floats, floating cranes and other vessels	50.54	108.90	347.64

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

2.3.5 Economic Community of West African States

Common ECOWAS exports to all three destinations are products of crude petroleum oils and oils obtained from bituminous minerals, and medium oils and preparations of petroleum or bituminous minerals (table 9). Gold is among the top 10 exports to both Africa and the world. There is a significant overlap between common intra-ECOWAS exports and exports to Africa. This partly reflects the high proportion of ECOWAS exports to the continent constituted by intra-community exports. Common products are palm oil and its fractions, light oils and preparations of petroleum or bituminous minerals, electrical energy, Portland cement, beauty or make-up preparations and preparations for the care of the skin, and sacks and bags. ECOWAS common exports to the world are concentrated in primary agricultural products and unprocessed minerals and petroleum. ECOWAS intra-communi-

ty and intra-African exports are more industry-related and offer opportunities for increased value addition and expansion in the context of the African Continental Free Trade Area.

The community's priority industry sectors identified in the implementation strategy for the West Africa Common Industry Policy for the period 2015–2020 are the food and agro-industry; pharmaceutical industry; construction materials industry; and automotive and machinery assembling industry. There is some convergence between the top exports and these priority sectors. For example, for the food and agroprocessing sector, cashew nuts, palm oil and cocoa beans are included among ECOWAS top exports. Under construction materials, Portland cement and aluminium are top exports. There is no convergence in two other priority sectors, namely pharmaceuticals and the automotive and machine assembling industry.

Table 9: Top 10 ECOWAS exports, 2016–2018 average (millions of United States dollars)

HS 6	Product description	Destination		
		ECOWAS	Africa	World
080131	Fresh or dried cashew nuts, in shell			2, 141.92
151190	Palm oil and its fractions, whether or not refined (P)	445.70	452.51	
180100	Cocoa beans, whole or broken, raw or roasted (P)			5 545.44
252329	Portland cement (excluding white) (P)	209.54	221.20	
260600	Aluminium ores and concentrates (P)			2 096.35
270900	Petroleum oils and oils obtained from bituminous minerals, crude	2 112.46	5 131.33	38 572.17
271012	Light oils and preparations, of petroleum or bituminous minerals, >= 90% vol	323.46	342.21	
271019	Medium oils and preparations, of petroleum or bituminous minerals	618.13	679.13	1 104.28
271111	Natural gas, liquefied			4 805.87
271600	Electrical energy	272.25	272.25	
330499	Beauty or make-up preparations and for the care of the skin	189.55	218.92	
392321	Sacks and bags, including cones, of polymers of ethylene	173.93	178.57	
392490	Household articles and toilet articles, of plastics (excluding tableware, kitchenware, baths	146.33		
400122	Technically specified natural rubber "TSNR"			799.45
520100	Cotton, neither carded nor combed			890.83
710812	Gold, including gold plated with platinum, unwrought, for non-monetary		1 038.99	4 952.97
710813	Gold, including gold plated with platinum, in semi-manufactured forms		760.61	7 072.52
790112	Unwrought zinc, not alloyed, containing < 99,99% of zinc	147.99		

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

2.3.6 Southern African Development Community

SADC common exports to all destinations are non-industrial diamonds, crude petroleum oils and oils obtained from bituminous minerals, light oils and preparations of petroleum or bituminous minerals and gold (table 10). Motor vehicles for the transport of goods are exported to Africa and the world, which is consistent with the industrial and

regional value chain priorities of the region. Common exports to SADC and Africa include electrical energy, copper ores and concentrates, gold, tobacco, partly or wholly stemmed or stripped, and mixtures of odoriferous substances and mixtures. These are also aligned with the SADC industrialization priorities, namely agroprocessing, minerals beneficiation and pharmaceuticals. Most of the top exports, which include copper, chromium, iron, petroleum, gold and diamonds, are aligned with the minerals beneficiation priority.

Table 10: Top 10 SADC exports, 2016–2018 average (millions of United states dollars)

HS 6	Product description	Destination		
		SADC	Africa	World
240120	Tobacco, partly or wholly stemmed or stripped, otherwise unmanufactured	866.66	892.88	
260112	Agglomerated iron ores and concentrates (excluding roasted iron pyrites)			2 748.33
260300	Copper ores and concentrates (P)	975.59	975.59	
261000	Chromium ores and concentrates (P)	535.07		
270112	Bituminous coal, whether or not pulverised, non-agglomerated (P)			5 155.76
270900	Petroleum oils and oils obtained from bituminous minerals, crude (P)	1 269.72	1 299.64	32 537.11
271012	Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume	1 467.18	1 590.36	2 592.25
271600	Electrical energy	1 066.50	1 066.50	
330210	Mixtures of odoriferous substances and mixtures, incl. alcoholic solutions	494.52	595.72	
710231	Non-industrial diamonds unworked or simply sawn, cleaved or bruted (excluding industrial diamonds) (P)	1 477.29	1 477.29	7 731.02
710812	Gold, including gold plated with platinum, unwrought, for non-monetary purposes (P)	897.41	897.41	
710813	Gold, including gold plated with platinum, in semi-manufactured forms, for non-monetary purposes (P)	876.24	885.35	5 898.93
720241	Ferro-chromium, containing by weight $> 4\%$ of carbon (P)			3 291.84
740200	Copper, unrefined; copper anodes for electrolytic refining			3 990.62
740311	Copper, refined, in the form of cathodes and sections of cathodes (P)			4 752.58
870421	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston		612.32	2 723.31

Source: ECA calculations based on UN Comtrade data.

P: Indicates exports which converge with the priorities of the regional economic community.

3. Potential for intra-African trade

The foregoing analysis indicates a low level of intra-African trade, concentrated within the regional economic communities. It also identifies the most common exports for each community, suggesting directions for expanding and adding value to existing exports. As noted in the introduction, however, the identification of priorities for standards harmonization on the exclusive basis of information on the most commonly traded goods would overlook the significant potential to tap into under-exploited opportunities. These opportunities are currently constrained by tariffs and non-tariff barriers which the African Continental Free Trade Area is expected to overcome. Accordingly, the present section presents the potential export basket for each of the regional economic communities, informed by estimations of the contribution to trade balance and international market position. The focus is placed on the potential export basket of each regional economic community to Africa (in other words, products in which each regional economic community has a comparative advantage and is competitive on the African market). At the same time, these results are also compared to the potential export basket to the world, for each regional economic community, in order to highlight potential opportunities unique to the African market.

The potential export basket analysis was based on three-year averages over the period 2016–2018, for all regions with the exception of ECCAS. As no 2018 data were available for ECCAS, the three-year averages were based on the years 2015–2017. The data were extracted from UN Comtrade, and the analysis applied to a total of 6,305 products or tariff lines defined according to the Harmonized System six-digit level. For purposes of presentation, the

categories are grouped according to the Harmonized System two-digit level (chapter description).

The products in the potential export basket are further classified according to the broad economic category. In this way it is possible to determine the level of usage of the products (in other words, whether capital, intermediate or finished goods).⁹ Beyond this, and more important, use of the broad economic category facilitates understanding of the level of processing and hence the level of value addition, and offers a starting point to identify potential value chains for the regions. It should, however, be noted that the intermediates category has been found to be broad in terms of analysing value chain participation (Hummels, Ishii and Yi, 1998; Yeats, 1998).

3.1. Potential export baskets

3.1.1 Arab Maghreb Union

3.1.1.1 Potential export basket to Africa

The AMU potential export basket to Africa comprises 1,705 products. The major categories of products in the basket are mineral fuels, oils, waxes, fertilizers, fish and crustaceans. Similar to the other regional economic communities, most of the products in the potential export basket are processed (36.1 per cent), followed by capital goods (23.3 per cent). The AMU potential export basket to Africa includes the lowest proportion of primary products, measuring 4.1 per cent of the total potential export basket. Value chains in AMU include petroleum, automobiles, fertilizers and fish.

9 See United Nations, Department of Economic and Social Affairs (2018).

Table 11: Top ten categories in the AMU potential export basket to Africa (HS two-digit level)

	HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
1	27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.0019124325	1.994738681
2	31	Fertilisers	0.0016202411	1.623818635
3	03	Fish and crustaceans, molluscs and other aquatic invertebrates	0.0006953926	0.697431284
4	16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	0.0005843676	0.584946643
5	87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.0005226513	0.535272985
6	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	0.0004420260	0.456388954
7	25	Salt; sulphur; earths and stone; plastering materials, lime and cement	0.0003012992	0.303174222
8	17	Sugars and sugar confectionery	0.0002802980	0.281990836
9	84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	0.0002638398	0.282360901
10	48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	0.0001657710	0.16714369

Source: ECA calculations based on UN Comtrade data.

3.1.1.2 Comparison of AMU potential export basket to Africa and potential export basket to the world

A total of 2,133 products from AMU have a comparative advantage in either one of the two destinations. Of these, 271 products are in both the potential export basket to the world and that to Africa. For the remaining 1,862 products, the baskets for the African and world markets differ.

Mineral fuels and oils, electrical machinery, articles of apparel and clothing, and fertilizers are the ma-

ior categories in the AMU potential export basket to the world. The AMU potential export basket to Africa includes more processed products (36.1 per cent) compared to its potential export basket to the world (20.4 per cent). In addition, like most of the other regional economic communities, the AMU comparative advantage to Africa is less limited to primary products than its comparative advantage to the world. There are also more primary products (14.2 per cent) in the region's potential export basket to the world than its potential export basket to Africa (4.1 per cent).

Table 12: Top ten categories in the AMU potential export basket to world (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.12938072	124.03151039
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	0.01032176	9.78514029
62	Articles of apparel and clothing accessories, not knitted or crocheted	0.00944678	8.88079663
31	Fertilisers	0.00735499	7.28651170
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.00611852	4.84949710
03	Fish and crustaceans, molluscs and other aquatic invertebrates	0.00509090	4.98453666
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	0.00454763	4.51744251
08	Edible fruit and nuts; peel of citrus fruit or melons	0.00329296	3.14118718
07	Edible vegetables and certain roots and tubers	0.00312025	3.01685853
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	0.00283251	2.81626779

Source: ECA calculations based on UN Comtrade data.

Table 13 compares products in the potential export baskets to Africa and to the world for Harmonized System codes 27 (mineral oils and fuels) and 31 (fertilizer). Crude petroleum oils, liquefied propane and natural gas; urea; and superphosphates and mineral and chemical fertilizers containing three fertilizing elements are examples of products appearing in both baskets. Liquefied gaseous hydro-

carbons and mixtures of urea and ammonium nitrate in aqueous or ammoniacal solution appears only in the potential export basket to the world. Examples of products limited to the potential export basket to Africa include natural bitumen and asphalt; mineral and chemical fertilizers containing two fertilizing elements; and ammonium sulphate.

Table 13: Comparison of products under HS two-digit codes 27 and 31 in the potential export baskets to Africa and to the world

HS 6	Product description	World	Africa
270300	Peat, incl. peat litter, whether or not agglomerated		X
270710	Benzol "benzene" containing > 50% of benzene (excluding chemically defined)		X
270799	Oils and other products of the distillation of high temperature coal tars; similar products ...	X	
270900	Petroleum oils and oils obtained from bituminous minerals, crude	X	X
271011	Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume incl. ...	X	
271012	Light oils and preparations, of petroleum or bituminous minerals which $\geq 90\%$ by volume "incl. ...	X	X
271099	Waste oils containing mainly petroleum or bituminous minerals (excluding those containing polychlorinated ...	X	
271111	Natural gas, liquefied	X	X
271112	Propane, liquefied	X	X
271113	Butanes, liquefied (excluding of a purity of $\geq 95\%$ of N-butane or isobutane)		X
271119	Gaseous hydrocarbons, liquefied, n.e.s. (excluding natural gas, propane, butane, ethylene, ...	X	
271121	Natural gas in gaseous state	X	X
271390	Residues of petroleum oil or of oil obtained from bituminous minerals (excluding petroleum ...	X	X
271490	Bitumen and asphalt, natural; asphaltites and asphaltic rocks		X
271500	Bituminous mastics, cut-backs and other bituminous mixtures based on natural asphalt, on natural ...		X
310210	Urea, whether or not in aqueous solution (excluding that in pellet or similar forms, or in ...	X	X
310221	Ammonium sulphate (excluding that in pellet or similar forms, or in packages with a gross weight ...		X
310280	Mixtures of urea and ammonium nitrate in aqueous or ammoniacal solution (excluding those in ...	X	
310310	Superphosphates (excluding those in tablets or similar forms, or in packages with a gross weight ...	X	X
310311	Superphosphates containing by weight $\Rightarrow 35\%$ of diphosphorus pentaoxide "P2O5" (excl. such ...	X	X
310420	Potassium chloride for use as fertiliser (excluding that in tablets or similar forms, or in ...		X
310520	Mineral or chemical fertilisers containing the three fertilising elements nitrogen, phosphorus ...	X	X
310530	Diammonium hydrogenorthophosphate "diammonium phosphate" (excluding that in tablets or similar ...	X	X
310540	Ammonium dihydrogenorthophosphate "monoammonium phosphate", whether or not mixed with diammonium ...	X	X
310559	Mineral or chemical fertilisers containing the two fertilising elements nitrogen (excluding ...	X	X
310590	Mineral or chemical fertilisers containing the two fertilising elements nitrogen and potassium ...		X

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

A majority of the products that fall in the export basket for both Africa and the world are fish and crustaceans, articles of apparel and clothing ac-

cessories, edible fruit and nuts. Fish, footwear and electrical machinery are examples of value chains for the regional and globally.

Table 14: Number of common products in the AMU potential export baskets to Africa and to the world

HS 2	Chapter description	No. of products
03	Fish and crustaceans, molluscs and other aquatic invertebrates	37
62	Articles of apparel and clothing accessories, not knitted or crocheted	24
08	Edible fruit and nuts; peel of citrus fruit or melons	17
07	Edible vegetables and certain roots and tubers	13
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	13
64	Footwear, gaiters and the like; parts of such articles	9
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	8
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	8
41	Raw hides and skins (other than furskins) and leather	7
61	Articles of apparel and clothing accessories, knitted or crocheted	7
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	6
20	Preparations of vegetables, fruit, nuts or other parts of plants	6
26	Ores, slag and ash	6
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	6
29	Organic chemicals	6
31	Fertilisers	6
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	5
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	5
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	4

Source: ECA calculations based on UN Comtrade data.

3.1.2 Common Market for Eastern and Southern Africa

3.1.2.1 Potential export basket to Africa

A total of 1,110 products make up the COMESA potential export basket to Africa (referred to in the tables as “PEB Africa”). These products offer higher potential for intra-African trade. According to the Harmonized System two-digit level, the top categories in this potential export basket include pearls and precious metals, raw tobacco, works of art, essential oils, ores, slag and ash, sugar, iron and steel. Within the potential export basket, 43.2 per cent of the products are processed, defined according to the broad economic category classification. Examples include various flat rolled products of alloy or non-alloy steel; organic and inorganic chemicals such as copper and cobalt oxides and hydroxides, pharmaceutical products such as unmixed immunological products; essential oils; and precious stones such as semi-manufactured gold. This group is followed by products mainly

for household consumption, primary products and semi-durable products. The top 10 product categories according to the Harmonized System two-digit level and in terms of the sum of their contribution to trade balance and international market position are identified in table 15. The categories are ranked by the sum of contribution to trade balance.

Potential regional value chains based on the COMESA potential export basket to Africa include minerals beneficiation (with the inclusion of various ores in the potential export basket); cotton (to make yarn, fabrics and textiles); and wood and timber.

Compared to the COMESA priority value chains for sector strategies, there is convergence between the COMESA identified priorities and its potential export basket. Thus, for each priority, there are two or more products in the basket (see table 16). COMESA has a particularly strong comparative advantage in chemicals such as carbon, phosphorus, mercury, copper and cobalt oxides and hydroxides,

Table 15: Top ten categories in the COMESA potential export basket to Africa (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.001510042	1.279855165
24	Tobacco and manufactured tobacco substitutes	0.001449936	1.42295517
99	Works of art, collectors' pieces and antiques	0.000952877	0.788769593
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	0.000934023	0.904668185
26	Ores, slag and ash	0.00077152	0.686958331
17	Sugars and sugar confectionery	0.000575706	0.538217002
72	Iron and steel	0.000521766	0.468309855
09	Coffee, tea, maté and spices	0.000452365	0.403583245
07	Edible vegetables and certain roots and tubers	0.000398486	0.363827621
62	Articles of apparel and clothing accessories, not knitted or crocheted	0.000360133	0.30935874

Source: ECA calculations based on UN Comtrade data.

Table 16: Comparison of COMESA priority value chains and the COMESA potential export basket to Africa

COMESA priorities (goods)	No. of products in PEB	COMESA priorities (services)
Automobiles/vehicles	9	Transport
Beef	6	Communication
Dairy products	2	Finance
Cereals	11	Tourism
Sugar	12	Energy
Pharmaceuticals	5	Construction
Leather	14	Business services
Minerals beneficiation	16	Distribution
Chemicals*	79	

*Includes both organic and inorganic chemicals.

Source: COMESA priorities communicated to ECA by the COMESA secretariat.

calcium carbonate, aluminium oxide, to name a few. There are numerous products of cotton (54 products) and wood (34 products) that are selected for the potential export basket, but are not included among the selected COMESA priority value chains. This indicates potential for expanding textile and wood-related (such as furniture) value chains oriented to the African market.

There is also convergence between the COMESA goods potential export basket to Africa and priority services identified. In the transport services sector, for example, COMESA has a comparative advantage in certain motor cars and motor vehicles principally for passengers, and also in car parts and accessories, for example, brakes, braking hubs and hub brakes. Where construction services are con-

cerned, the region has a comparative advantage in white Portland cement, various iron and steel products, and chemicals that are major inputs in the construction industry.

3.1.2.2 Comparison of the COMESA potential export basket to Africa and potential export basket to the world

There are a total of 1,447 products in the COMESA region that have a comparative advantage in Africa or the world. Thus, they appear in either one or both potential export baskets. Of these, 465 products are in both the potential export basket for the world (referred to in the tables as "PEB world") and the potential export basket to Africa, meaning that they have a comparative advantage both in Africa,

Table 17: Top ten categories in the COMESA potential export basket to the world (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.033274398	26.77646723
74	Copper and articles thereof	0.013900049	13.25912452
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.012464271	9.248689217
09	Coffee, tea, maté and spices	0.005888737	5.712495947
81	Other base metals; cermets; articles thereof	0.003724806	3.687685478
26	Ores, slag and ash	0.003436287	2.839419886
62	Articles of apparel and clothing accessories, not knitted or crocheted	0.002820857	2.124879792
08	Edible fruit and nuts; peel of citrus fruit or melons	0.002714211	2.337699964
07	Edible vegetables and certain roots and tubers	0.002565052	2.22485962
24	Tobacco and manufactured tobacco substitutes	0.002557097	2.457425495

Source: ECA calculations based on UN Comtrade data.

and also in the rest of the world. The remaining 982 products are included in only one of the potential export baskets.

According to the Harmonized System two-digit level, the major categories of products in the COMESA potential export basket to the world are mineral fuels and oils; coppers and its articles; pearls, precious stones and metals; coffee, tea, maté and spices. Processed products account for 27.7 per cent of the COMESA potential export basket to the world (compared to 43.2 per cent for its potential export basket to Africa); 27.3 per cent are for household consumption; and 18.3 per cent are primary products (compared to 11.1 per cent for its potential export basket to Africa), indicating that the region's comparative advantage to Africa, compared to that to the rest of the world, is less limited to primary products.

For demonstration purposes, table 18 compares products in each potential export basket (PEB Africa and PEB world) for Harmonized System two-digit codes 27 (mineral fuels and oils) and 71 (natural and cultured pearls, precious and semi-precious stones and metals). An important insight is that most of the products are in only one potential ex-

port basket. For example, crude petroleum oils and oils obtained from bituminous minerals; liquefied propane; natural gas in gaseous state; paraffin wax; and platinum in semi-manufactured forms are only in the potential export basket to the world. On the other hand, calcined petroleum coke; unworked and worked industrial diamonds; and worked and unworked precious and semi-precious stones are examples of products found only in the potential export basket to Africa, the majority of which have undergone some level of processing. A comparison of all products in the community's potential export basket to Africa and its potential export basket to the world may be found in annex 7.

Grouped according to the Harmonized System two-digit level, most of the products that have a comparative advantage in both Africa and the world are edible vegetables, roots and tubers; knitted or crocheted articles of apparel and clothing, fish and crustaceans, and articles of apparel and clothing that are not knitted or crocheted (table 19). These offer opportunities for forward and backward linkages, and also entry into global value chains. Apparel and clothing, for example, can link to cotton as a source for raw materials, and can enter into the global textile and clothing value chain.

Table 18: Comparison of products under HS two-digit codes 27 and 71 in the potential export baskets to Africa and to the world

HS 6	Product description	World	Africa
270120	Briquettes, ovoids and similar solid fuels manufactured from coal	X	X
270210	Lignite, whether or not pulverised, non-agglomerated (excluding jet)	X	X
270220	Agglomerated lignite (excluding jet)	X	X
270600	Tar distilled from coal, from lignite or from peat, and other mineral tars, whether or not ...	X	X
270810	Pitch obtained from coal tar or from other mineral tars	X	X
270900	Petroleum oils and oils obtained from bituminous minerals, crude	X	
271011	Light oils and preparations, of petroleum or bituminous minerals which >= 90% by volume incl. ...	X	X
271112	Propane, liquefied	X	
271114	Ethylene, propylene, butylene and butadiene, liquefied (excluding ethylene of a purity of >= ...	X	X
271121	Natural gas in gaseous state	X	
271220	Paraffin wax containing < 0,75% by weight of oil	X	X
271290	Paraffin wax, microcrystalline petroleum wax, slack wax, ozokerite, lignite wax, peat wax, ...	X	
271312	Petroleum coke, calcined		X
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted		X
710229	Industrial diamonds, worked, but not mounted or set (excluding unmounted stones for pick-up ...		X
710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...		X
710399	Precious and semi-precious stones, worked, whether or not graded, but not strung, mounted or ...		X
710692	Silver, incl. silver plated with gold or platinum, semi-manufactured		X
710811	Gold, incl. gold plated with platinum, for non-monetary purposes		X
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...		X
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes		X
711011	Platinum, unwrought or in powder form		X
711019	Platinum, in semi-manufactured forms	X	
711100	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	X	X
711230	Ash containing precious metal or precious-metal compounds	X	
711291	Waste and scrap of gold, incl. metal clad with gold, and other waste and scrap containing gold ...	X	
711292	Waste and scrap of platinum, incl. metal clad with platinum, and other waste and scrap containing ...	X	
711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing ...	X	X
711311	Articles of jewellery and parts thereof, of silver, whether or not plated or clad with other precious metal	X	X
711320	Articles of jewellery and parts thereof, of base metal clad with precious metal (excluding ...	X	X
711411	Articles of goldsmiths' or silversmiths' wares or parts thereof, of silver, whether or not ...		X
711419	Articles of goldsmiths' or silversmiths' wares or parts thereof, of precious metal other than ...		X
711510	Catalysts in the form of wire cloth or grill, of platinum	X	
711610	Articles of natural or cultured pearls, n.e.s.	X	
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.	X	X

Source: ECA calculations based on UN Comtrade data.

Table 19: Number of products common to the COMESA potential export baskets to Africa and to the world

HS 2	Chapter description	No. of products
07	Edible vegetables and certain roots and tubers	30
61	Articles of apparel and clothing accessories, knitted or crocheted	24
03	Fish and crustaceans, molluscs and other aquatic invertebrates	20
62	Articles of apparel and clothing accessories, not knitted or crocheted	20
44	Wood and articles of wood; wood charcoal	18
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	15
26	Ores, slag and ash	15
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	13
08	Edible fruit and nuts; peel of citrus fruit or melons	12
09	Coffee, tea, maté and spices	12
41	Raw hides and skins (other than furskins) and leather	12
52	Cotton	11
70	Glass and glassware	11
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	11
72	Iron and steel	11
20	Preparations of vegetables, fruit, nuts or other parts of plants	10
23	Residues and waste from the food industries; prepared animal fodder	10
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	9
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	9
29	Organic chemicals	9

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

Given the large number of products contained in the potential export baskets, it is not possible to include a full comparative analysis, looking at which products have a comparative advantage at the level of Africa, the world or both. In box 5, however, a comparison is made for the sugar sector, which is identified as one of the priority sectors for value chain development in COMESA. In general, all sugar products in both potential export baskets

are largely primary commodities that can be used as inputs for industry (intermediate goods) and household goods for consumption. Thus, for the sugar sector, there is scope to develop a regional value chain that can also feed into a global value chain. The same is true for ores, slugs and ash, which include manganese, tin, lead, copper and cobalt ores, all of which are primary products.

Box 5: Comparison of sugar products in the COMESA potential export baskets to Africa and to the world

HS 6	Product description	PEB Africa	PEB world
170220	Maple sugar, in solid form, and maple syrup (excluding flavoured or coloured)	No	Yes
170250	Chemically pure fructose in solid form	No	Yes
170112	Raw beet sugar (excluding added flavouring or colouring)	Yes	No
170113	Raw cane sugar, in solid form, not containing added flavouring or colouring matter, obtained ...	Yes	No
170191	Refined cane or beet sugar, containing added flavouring or colouring, in solid form	Yes	No
170219	Lactose in solid form and lactose syrup, not containing added flavouring or colouring matter, ...	Yes	No
170260	Fructose in solid form and fructose syrup, not containing added flavouring or colouring matter ...	Yes	No
170490	Sugar confectionery not containing cocoa, incl. white chocolate (excluding chewing gum)	Yes	No
170114	Raw cane sugar, in solid form, not containing added flavouring or colouring matter (excluding ...)	Yes	Yes
170240	Glucose in solid form and glucose syrup, not containing added flavouring or colouring matter, ...	Yes	Yes
170290	Sugars in solid form, incl. invert sugar and chemically pure maltose, and sugar and sugar syrup ...	Yes	Yes
170310	Cane molasses resulting from the extraction or refining of sugar	Yes	Yes
170390	Beet molasses resulting from the extraction or refining of sugar	Yes	Yes
170410	Chewing gum, whether or not sugar-coated	Yes	Yes

Source: ECA calculations based on UN Comtrade data.

3.1.3 East African Community

3.1.3.1 Potential export basket to Africa

There are 1,041 products in the EAC potential export basket to Africa. The top three categories, grouped according to the Harmonized System chapter 2 descriptions are pearls, precious and semi-precious stones, coffee, tea and spices, and tobacco. As with COMESA, the bulk of the products in the EAC potential export basket to Africa are processed products, defined according to the broad economic category classification. These make up 39.3 per cent of the potential export basket. Examples of such processed products from the iron and steel sector include various flat rolled products of iron and steel; bars and rods of non-alloy steel; wires of stainless steel and wires of alloy steel. Processed products are followed by products mainly for household consumption (14.8 per cent) and capital goods excluding capital equipment (11.7 per cent). Primary products account for only 6.4 per cent of products in the potential export basket.

Based on the EAC potential export basket to Africa, there is potential for the development of regional value chains in agroprocessing, in particular for

fruits, vegetables, cereals, coffee and tea. Another potential value chain is iron and steel processing, which includes, among other processes, transforming from iron ore, iron making, steel manufacturing, casting of steel and hot rolled steel. There is also potential to develop a value chain around gemstones, and also cotton.

The potential export basket contains products identified as priorities in the industrialization policy for the EAC region (table 21). The bulk of products fall under the description "iron and steel". It is estimated, however, that agroprocessing and other mineral processing also have numerous products in the potential export basket, given the wide range of sectors and minerals that they cover.

The majority of the products in the potential export basket fall in the description of nuclear reactors, boilers, machinery and mechanical appliances, followed by inorganic chemicals. These, however, are not included as priorities for the region. All products in these two categories are either processed or capital goods and offer opportunities for expanding exports to Africa under the African Continental Free Trade Area.

Table 20: Top ten categories in the EAC potential export basket to Africa (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.003802271	3.850436457
09	Coffee, tea, maté and spices	0.002600702	2.623441429
24	Tobacco and manufactured tobacco substitutes	0.000617516	0.638571406
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.000599319	0.760593205
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	0.000515081	0.538770059
11	Products of the milling industry; malt; starches; inulin; wheat gluten	0.000407059	0.413055229
23	Residues and waste from the food industries; prepared animal fodder	0.000378497	0.380841412
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	0.00036405	0.374788188
70	Glass and glassware	0.000356048	0.360496663
10	Cereals	0.000324399	0.333254234

Source: ECA calculations based on UN Comtrade data.

Table 21: Comparison of EAC priority value chains and the EAC potential export basket to Africa

EAC priorities	No. of products in PEB
Agroprocessing	Numerous*
Iron and steel processing	66
Other minerals processing (beryllium, bismuth, copper, clay, glass sands, gold, gypsum, lead-zinc ores, limestone, lithium, marble, mica, phosphates, silver, uranium, coal, platinum, tin, tungsten, salt, vermiculite, oil, and cobalt)	Numerous*
Chemicals (fertilizer and agrochemicals)	8 (fertilizer)
Pharmaceuticals	13
Energy	1
Oil and gas processing	11

*Broad sector containing various other subsectors.

Source: EAC industrialization policy 2012–2032.

3.1.3.2 Comparison of the EAC potential export basket to Africa and potential export basket to the world

A total of 1,370 products from EAC have a comparative advantage in relation either to Africa or to the world. Of these, 365 products are in both the export baskets for the world and for Africa, signifying a comparative advantage for both export destinations. For the remaining 1,004 products, the potential export basket differs for the African and world markets.

The major categories in the EAC potential export basket to the world are pearls, precious and semi-precious stones, precious metals, and others; coffee, tea, maté, spices; live trees and other plants;

edible fruits and nuts (table 22). Primary products account for 25.3 per cent of the community's potential export basket to the world, compared to 6.4 per cent of its potential export basket to Africa. The majority of the products in the potential export basket to the world are mainly for household consumption (29.8 per cent), while the potential export basket to Africa is dominated by processed products, as indicated above.

Table 23 compares products in the potential export basket to Africa and the potential export basket to the world for Harmonized System two-digit codes 09 (coffees, tea, maté, spices) and 71 (natural and cultured pearls, precious and semi-precious stones and metals). For these two categories, only a few products are in both baskets, such as decaffeinated

Table 22: Top ten categories in the EAC potential export basket to the world (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.0139984	12.0031823
09	Coffee, tea, maté and spices	0.0135789	13.4420635
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	0.0042991	4.2461706
08	Edible fruit and nuts; peel of citrus fruit or melons	0.0029762	2.9134183
26	Ores, slag and ash	0.0025547	2.4733717
07	Edible vegetables and certain roots and tubers	0.0015519	1.5167696
03	Fish and crustaceans, molluscs and other aquatic invertebrates	0.0014534	1.3952770
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	0.0007115	0.6969964
20	Preparations of vegetables, fruit, nuts or other parts of plants	0.0006264	0.6131054
41	Raw hides and skins (other than furskins) and leather	0.0006095	0.5922470

Source: ECA calculations based on UN Comtrade data.

ed coffee; roasted coffee; green tea in immediate packings; vanilla; cloves; worked precious and semi-precious stone. Others are in only one potential export basket. Examples of products only in the potential export basket to Africa include nutmeg, mace and cardamom, while those only in the potential export basket to the world include roasted decaffeinated coffee; unsorted diamonds; and worked and unworked industrial diamonds.

Of the products that are in both potential export baskets, most are agricultural and food products, such as fish and crustaceans, edible vegetables, meat, and coffee, tea and spices, indicating potential for the development of various external-

ly oriented agroprocessing value chains in these subsectors. In each category, there are more than 15 products that have a comparative advantage in both Africa and the world.

A detailed look at the top 10 categories shows that most of the products are for household consumption or primary products. For fish, vegetable, fruits and nuts, the level of value addition is limited to the chilling, drying or smoking of the products. This presents an opportunity for the development of agroprocessing value chains – or the entering of existing such chains – both at regional and global levels.

Table 23: Comparison of products under HS two-digit codes 09 and 71 in the potential export baskets to Africa and the world

HS 6	Product description	World	Africa
090111	Coffee (excluding roasted and decaffeinated)	X	X
090112	Decaffeinated coffee (excluding roasted)	X	X
090121	Roasted coffee (excluding decaffeinated)	X	X
090122	Roasted, decaffeinated coffee	X	
090210	Green tea in immediate packings of ≤ 3 kg	X	X
090220	Green tea in immediate packings of > 3 kg	X	X
090230	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings ...	X	X
090240	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings ...	X	X
090411	Pepper of the genus Piper, neither crushed nor ground	X	X
090412	Pepper of the genus Piper, crushed or ground	X	
090420	Fruits of the genus Capsicum or of the genus Pimenta, dried or crushed or ground	X	X
090421	Fruits of the genus Capsicum or of the genus Pimenta, dried, neither crushed nor ground	X	

HS 6	Product description	World	Africa
090500	Vanilla	X	X
090510	Vanilla, neither crushed nor ground	X	
090520	Vanilla, crushed or ground	X	X
090611	Cinnamon "Cinnamomum zeylanicum Blume" (excluding crushed and ground)	X	
090619	Cinnamon and cinnamon-tree flowers (excluding cinnamon "Cinnamomum zeylanicum Blume" and crushed ...)		X
090700	Cloves, whole fruit, cloves and stems	X	X
090710	Cloves, whole fruit, cloves and stems, neither crushed nor ground	X	
090720	Cloves, whole fruit, cloves and stems, crushed or ground	X	X
090810	Nutmeg		X
090820	Mace		X
090830	Cardamoms		X
090922	Coriander seeds, crushed or ground	X	
091012	Ginger, crushed or ground	X	X
091099	Spices (excluding pepper of the genus Piper, fruit of the genus Capsicum or of the genus Pimenta, ...)	X	X
710210	Diamonds, unsorted	X	
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted	X	
710229	Industrial diamonds, worked, but not mounted or set (excluding unmounted stones for pick-up ...)	X	
710231	Non-industrial diamonds unworked or simply sawn, cleaved or bruted (excluding industrial diamonds)	X	
710239	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	X	
710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...	X	X
710391	Rubies, sapphires and emeralds, worked, whether or not graded, but not strung, mounted or set, ...	X	
710399	Precious and semi-precious stones, worked, whether or not graded, but not strung, mounted or ...	X	X
710410	Quartz, piezoelectric, of synthetic or reconstructed stone whether or not worked or graded, ...	X	
710420	Precious and semi-precious stones, synthetic or reconstructed, unworked or simply sawn or roughly ...	X	
710490	Precious and semi-precious stones, synthetic or reconstructed, worked, whether or not graded ...	X	
710610	Powder of silver, incl. silver plated with gold or platinum	X	X
710691	Silver, incl. silver plated with gold or platinum, unwrought (excluding silver in powder form)	X	
710692	Silver, incl. silver plated with gold or platinum, semi-manufactured	X	
710700	Base metals clad with silver, not further worked than semi-manufactured	X	
710811	Gold, incl. gold plated with platinum, for non-monetary purposes	X	
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...)	X	X
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes	X	
710900	Base metals or silver, clad with gold, not further worked than semi-manufactured	X	X
711011	Platinum, unwrought or in powder form	X	
711100	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	X	
711230	Ash containing precious metal or precious-metal compounds	X	
711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing ...	X	
711610	Articles of natural or cultured pearls, n.e.s.	X	
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.	X	
711790	Imitation jewellery (excluding jewellery, of base metal, whether or not clad with silver, gold ...)	X	X
711810	Coin (excluding legal tender, gold coins, medals, jewellery made from coins, collectors' items ...)	X	

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

Table 24: Number of common products in the EAC potential export baskets to Africa and to the world

HS 2	Chapter description	No. of products
03	Fish and crustaceans, molluscs and other aquatic invertebrates	24
07	Edible vegetables and certain roots and tubers	23
02	Meat and edible meat offal	16
09	Coffee, tea, maté and spices	15
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	10
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	10
08	Edible fruit and nuts; peel of citrus fruit or melons	10
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	10
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	10
52	Cotton	10
72	Iron and steel	10
24	Tobacco and manufactured tobacco substitutes	9
11	Products of the milling industry; malt; starches; inulin; wheat gluten	8
20	Preparations of vegetables, fruit, nuts or other parts of plants	8
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	8
41	Raw hides and skins (other than furskins) and leather	8
05	Products of animal origin, not elsewhere specified or included	7
44	Wood and articles of wood; wood charcoal	7
01	Live animals	6
23	Residues and waste from the food industries; prepared animal fodder	6

Source: ECA calculations based on UN Comtrade data.

There are more processed products in the EAC potential export basket to Africa (39.3 per cent), than its potential export basket to the world (25.3 per cent). On the other hand, the EAC comparative advantage vis-à-vis Africa is less limited to primary products (which account for only 6.4 per cent of the total potential export basket), while primary products account for 17.9 per cent of the EAC potential export basket to the world.

3.1.4 Economic Community of Central African States

3.1.4.1 Potential export basket to Africa

There are 500 products in the ECCAS potential export basket to Africa. These offer a particular opportunity for intra-African trade. Principal among these are ships, boats and floating structures; cof-

ees, tea, spices, soaps, wood and wood articles; and mineral fuels and oils. In all, 32.2 per cent of the products in the potential export basket are classified as processed, according to the broad economic category classification. Capital goods, goods for household consumption and primary products constitute 18.4, 11.4 and 11.2 per cent of the basket respectively. Opportunities for value chains include the manufacture of ships, boats and water vessels; agroprocessing; and petroleum and wood products.

Examples of products in the potential wood regional value chain include logs, timber, planks and products for construction and furniture making. Agroprocessing includes food and beverage processing, preservation of fruits and vegetables, and coffee processing.

Table 25: Top ten categories in the ECCAS potential export basket to Africa (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2015–2017 average	Sum of POS 2015–2017 average
89	Ships, boats and floating structures	0.0006742799	0.6493900236
09	Coffee, tea, maté and spices	0.0003124086	0.2868952112
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modelling pastes, 'dental waxes' and dental preparation	0.0001926359	0.1876064269
44	Wood and articles of wood; wood charcoal	0.0001402924	0.1300792241
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.0001082002	0.0793857390
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	0.0000929416	0.0480047333
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.0000878707	0.0381249804
72	Iron and steel	0.0000785210	0.0629524359
18	Cocoa and cocoa preparations	0.0000761564	0.0418565421
76	Aluminium and articles thereof	0.0000741915	0.0559651286

Source: ECA calculations based on UN Comtrade data.

3.1.4.2 Comparison of the ECCAS potential export basket to Africa and potential export basket to the world

A total of 553 products from the ECCAS region have a comparative advantage either in Africa or to the world. Of these, 103 products are in both the potential export basket to the world and the potential export basket to Africa, while the remaining 450 products are on only one or the other of the two baskets.

Mineral fuels and oils; cocoa and cocoa preparations; wood and wood articles are the major cat-

egories in the ECCAS potential export basket to the world. In both baskets, the bulk of products are processed: 31.0 per cent in the community's potential export basket to the world and 32.0 per cent in its potential export basket to Africa. The numbers are different in the case of primary products. These account for 25.6 per cent of all products in the basket to the world, but only 11.2 per cent of the basket to Africa. This indicates that the ECCAS comparative advantage within Africa is more diversified than that for the world.

Table 27 compares products in the potential export basket to Africa and the potential export basket to

Table 26: Top ten categories in the ECCAS potential export basket to the world

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.0494925906	49.7605856261
18	Cocoa and cocoa preparations	0.0033550367	3.3603565674
44	Wood and articles of wood; wood charcoal	0.0024522262	2.4552458574
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.0014253971	1.4255084120
26	Ores, slag and ash	0.0002769814	0.2775326410
40	Rubber and articles thereof	0.0000174343	0.0180281592
41	Raw hides and skins (other than furskins) and leather	0.0000022608	0.0023129985
81	Other base metals; cermets; articles thereof	0.0000003575	0.0003639899
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	0.0000001029	0.0001068901

Source: ECA calculations based on UN Comtrade data.

Table 27: Comparison of products under HS two-digit codes 09 and 89 in the potential export baskets to Africa and to the world

HS 6	Product description	World	Africa
090111	Coffee (excluding roasted and decaffeinated)	X	X
090121	Roasted coffee (excluding decaffeinated)		X
090122	Roasted, decaffeinated coffee	X	X
090190	Coffee husks and skins; coffee substitutes containing coffee in any proportion	X	X
090230	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings ...	X	X
090240	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings ...	X	X
090300	Maté		X
090411	Pepper of the genus Piper, neither crushed nor ground	X	
090421	Fruits of the genus Capsicum or of the genus Pimenta, dried, neither crushed nor ground	X	
890110	Cruise ships, excursion boats and similar vessels principally designed for the transport of ...	X	X
890190	Vessels for the transport of goods and vessels for the transport of both persons and goods ...	X	X
890200	Fishing vessels; factory ships and other vessels for processing or preserving fishery products ...		X
890400	Tugs and pusher craft	X	X
890510	Dredgers	X	
890520	Floating or submersible drilling or production platforms	X	X
890590	Light-vessels, fire-floats, floating cranes and other vessels, the navigability of which is ...	X	
890690	Vessels, incl. lifeboats (excluding warships, rowing boats and other vessels of heading 8901 ...	X	

Source: ECA calculations based on UN Comtrade data.

Table 28: Number of common products in the ECCAS potential export baskets to Africa and to the world

HS 2	Chapter description	No. of products
44	Wood and articles of wood; wood charcoal	10
09	Coffee, tea, maté and spices	6
41	Raw hides and skins (other than furskins) and leather	6
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	5
18	Cocoa and cocoa preparations	5
52	Cotton	5
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	4
72	Iron and steel	4
89	Ships, boats and floating structures	4
03	Fish and crustaceans, molluscs and other aquatic invertebrates	3
05	Products of animal origin, not elsewhere specified or included	3
07	Edible vegetables and certain roots and tubers	3
23	Residues and waste from the food industries; prepared animal fodder	3
40	Rubber and articles thereof	3
08	Edible fruit and nuts; peel of citrus fruit or melons	2
11	Products of the milling industry; malt; starches; inulin; wheat gluten	2
22	Beverages, spirits and vinegar	2
24	Tobacco and manufactured tobacco substitutes	2
26	Ores, slag and ash	2
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	2

Source: ECA calculations based on UN Comtrade data.

the world for Harmonized System codes 09 (coffee, teas, maté, spices) and 89 (ships, boats and floating structures). Appearing in both baskets are such products as roasted decaffeinated coffee; black fermented tea; tugs and pusher craft; and floating or submersible drilling and production platforms. Only maté and fishing vessels, factory ships and other vessels for processing or preserving fishery products, while pepper of the genus Piper, neither crushed nor ground; light-vessels, fire-floats, floating cranes and other vessels, are examples appearing in only the potential export basket to the world.

At the Harmonized System two-digit level, wood and articles of wood account for the majority of products appearing in both potential export baskets. These are followed by coffee, tea and spices, and raw hides, skins and leather, each of which include six products. The examples of value chain opportunities for coffee here are similar to those identified in the section above. For hides and skins, regional value chain opportunities include tanned or crust leather, further dressing of leather and related articles of leather, including bags, shoes, belts, jackets.

3.1.5 Economic Community of West African States

3.1.5.1 Potential export basket to Africa

The ECOWAS potential export basket to Africa has 439 products, predominantly mineral fuels, oils and their distilled products, followed by pearl, precious and semi-precious stones and precious metals and plastic products. In terms of their broad economic category classification, 38.5 per cent of the products in the basket are processed, 16.2 per cent are products for home consumption and 16.7 per cent products for industrial consumption. Primary products account for only 8.4 per cent of the potential export basket to Africa.

Based on the potential export basket, potential value chains include mineral fuels which cover petroleum products, bituminous products, plastics and lubricants. There is also potential for adding value to precious stones and essential oils to manufacture perfumes and other cosmetic products.

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Table 29: Top ten categories in ECOWAS potential export basket to Africa (HS two-digit level)

HS 2	Chapter Description	Sum of CTB 2016 - 2018 Average	Sum of POS 2016 - 2018 Average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.0051821560	6.322980459
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.0029591616	3.1579155
39	Plastics and articles thereof	0.0006459845	0.671830303
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	0.0004591429	0.50265278
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	0.0004063237	0.42459429
79	Zinc and articles thereof	0.0002575286	0.25971276
89	Ships, boats and floating structures	0.0002401596	0.267899363
01	Live animals	0.0002318714	0.241537856
10	Cereals	0.0002185429	0.236562718
09	Coffee, tea, maté and spices	0.0001281351	0.150100017

Source: ECA calculations based on UN Comtrade data.

strategy for the period 2015–2020¹⁰ identify broad priority sectors for the region. The ECOWAS policy identifies these sectors at the country level, setting priorities in agribusiness, construction and light manufacturing. This converges with the West Africa common policy, which identifies agriculture-related industrial activities and minerals processing as areas in which the region has a comparative advantage. Accordingly, many of the products in the potential export basket fall within the region's priorities. In agribusiness, for example, products include fruits, cotton, cocoa and cereals, while in light manufacturing, the products include wood products, cotton and textiles, rubber, leather and plastics, among others.

3.1.5.2 Comparison of the ECOWAS potential export basket to Africa and potential export basket to the world

The ECOWAS potential export baskets to Africa and to the world have a total of 796 products. Only 177 products are in both the baskets for the world and for Africa. The remaining 619 products appear in only one of the two potential baskets.

The major categories of products in the ECOWAS potential export basket to the world are mineral oils and fuels; pearls, precious stones and metals; cocoa and cocoa preparations; ores, slag and ash. The bulk of products in the region's potential ex-

port basket to the world are for household consumption (32.0 per cent). Processed products make up 24.9 per cent of the potential export basket to the world and primary products 21.2 per cent. Processed products constitute 38.5 per cent of the ECOWAS potential export basket to Africa, while primary products constitute only 8.4 per cent. This indicates that the community's comparative advantage to Africa is more diversified than its comparative advantage to the world, with less focus on primary products.

Table 31 compares products in the potential export baskets to Africa and to the world for Harmonized System two-digit codes 27 (mineral fuels and oils) and 71 (natural and cultured pearls, precious and semi-precious stones and metals). The bulk of products in these two-digit codes appear in only one basket. Base metals clad with silver, not further worked than semi-manufactured, is the only product limited to the potential export basket to Africa. Liquefied propane and unsorted diamonds are examples of products that appear only in the potential export basket to the world.

The top categories of products that feature in both the potential export baskets to the world and to Africa include oil seeds and oleaginous fruits, wood and articles of wood, fish and crustaceans and live animals.

Table 30: Top ten categories in the ECOWAS potential export basket to the world

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.07355543	72.89905911
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.02132236	21.10311493
18	Cocoa and cocoa preparations	0.01316334	13.14691262
26	Ores, slag and ash	0.00501045	4.94363457
08	Edible fruit and nuts; peel of citrus fruit or melons	0.00461131	4.59072205
52	Cotton	0.00184085	1.83180856
40	Rubber and articles thereof	0.00160755	1.59820753
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	0.00087913	0.87656968
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	0.00063488	0.63183265
44	Wood and articles of wood; wood charcoal	0.00053460	0.52839481

Source: ECA calculations based on UN Comtrade data.

10 ECOWAS, 2018, and West Africa Common Industrial Policy Implementation Strategy 2015–2020, Abuja: ECOWAS Commission.

Table 31: Comparison of products under HS two-digit codes 27 and 71 in the potential export baskets to Africa and to the world

HS Code	Product description	World	Africa
270740	Naphthalene containing > 50% of naphthalene (excluding chemically defined)	X	X
270900	Petroleum oils and oils obtained from bituminous minerals, crude	X	X
271099	Waste oils containing mainly petroleum or bituminous minerals (excluding those containing polychlorinated ...)	X	X
271111	Natural gas, liquefied	X	X
271112	Propane, liquefied	X	
271119	Gaseous hydrocarbons, liquefied, n.e.s. (excluding natural gas, propane, butane, ethylene, ...)	X	X
271129	Hydrocarbons in gaseous state, n.e.s. (excluding natural gas)	X	
271600	Electrical energy	X	X
710210	Diamonds, unsorted	X	
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted	X	
710229	Industrial diamonds, worked, but not mounted or set (excluding unmounted stones for pick-up ...)	X	
710231	Non-industrial diamonds unworked or simply sawn, cleaved or bruted (excluding industrial diamonds)	X	
710239	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	X	
710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...	X	
710391	Rubies, sapphires and emeralds, worked, whether or not graded, but not strung, mounted or set, ...	X	
710399	Precious and semi-precious stones, worked, whether or not graded, but not strung, mounted or ...	X	
710691	Silver, incl. silver plated with gold or platinum, unwrought (excluding silver in powder form)	X	
710692	Silver, incl. silver plated with gold or platinum, semi-manufactured	X	
710700	Base metals clad with silver, not further worked than semi-manufactured		X
710811	Gold, incl. gold plated with platinum, for non-monetary purposes	X	
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...)	X	X
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes	X	X
711100	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	X	X
711291	Waste and scrap of gold, incl. metal clad with gold, and other waste and scrap containing gold ...	X	
711292	Waste and scrap of platinum, incl. metal clad with platinum, and other waste and scrap containing ...	X	
711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing ...	X	
711311	Articles of jewellery and parts thereof, of silver, whether or not plated or clad with other ...	X	
711411	Articles of goldsmiths' or silversmiths' wares or parts thereof, of silver, whether or not ...	X	
711510	Catalysts in the form of wire cloth or grill, of platinum	X	
711810	Coin (excluding legal tender, gold coins, medals, jewellery made from coins, collectors' items ...)	X	

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

Table 32: Number of common products in the ECOWAS potential export baskets to Africa and to the world

HS 2 code	HS 2 chapter description	No. of products
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	14
44	Wood and articles of wood; wood charcoal	12
03	Fish and crustaceans, molluscs and other aquatic invertebrates	11
01	Live animals	10
08	Edible fruit and nuts; peel of citrus fruit or melons	9
23	Residues and waste from the food industries; prepared animal fodder	8
38	Miscellaneous chemical products	8
52	Cotton	7
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	6
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	6
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	5
07	Edible vegetables and certain roots and tubers	4
18	Cocoa and cocoa preparations	4
37	Photographic or cinematographic goods	4
39	Plastics and articles thereof	4
41	Raw hides and skins (other than furskins) and leather	4
26	Ores, slag and ash	3
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	3
02	Meat and edible meat offal	2
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	2

Source: ECA calculations based on UN Comtrade data.

3.1.6 Southern African Development Community

3.1.6.1 Potential export basket to Africa

A total of 2,117 products make up the SADC potential export basket to Africa. The major categories of products in the basket are pearls, precious and semi-precious stones and precious metals, ores, slag and ash, tobacco, mineral fuels and oils, and iron and steel. Broken down into the broad economic category classification, 38.1 per cent of the products in this basket are processed, 13.2 per cent are capital goods, 13.0 per cent are products mainly for household consumption and 6.8 per cent are primary products.

Potential value chains in SADC include precious stones, minerals beneficiation, automobiles and sugar, along with a number of others. A comparative advantage in various ores presents an opportunity for value addition through beneficiation of such ores, which include iron, copper, cobalt, chromium,

tungsten, nickel, cobalt and antimony. Apart from these, there are further opportunities in the iron and steel value chain, which include manufacture of iron and steel, casting of steel and manufacture of products for assembly of vehicles. This is aligned in particular with the automobile value chain.

The SADC industrialization strategy and road map for the period 2015–2063 (SADC, 2015) prioritizes three growth paths that are mutually compatible for the region, namely agriculture-led growth, natural resource-led growth and regional value chains and global value chains. Accordingly, the areas prioritized are agroprocessing and mineral beneficiation. Various products in the potential export basket fall within these identified priorities. In agriculture, for example, there are such products as fruit, fish, meat, vegetables, coffee, tea and cereals, while under minerals beneficiation, the products include copper, precious stones and metals, and various ores, slag and ash, such as copper, cobalt, nickel, tungsten and chromium, to name a few.

Table 33: Top ten categories in the SADC potential export basket to Africa (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.0042245978	75.29127965
26	Ores, slag and ash	0.0023513691	19.02881977
24	Tobacco and manufactured tobacco substitutes	0.0018516099	5.135734786
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.0017138515	31.2740598
72	Iron and steel	0.0013968090	10.4050886
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	0.0008407836	5.145427983
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.0005564592	9.067963847
22	Beverages, spirits and vinegar	0.0003759103	2.480850216
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	0.0003712422	2.371682075
17	Sugars and sugar confectionery	0.0003693371	1.482615192

Source: ECA calculations based on UN Comtrade data.

3.1.6.2 Comparison of the SADC potential export basket to Africa and potential export basket to the world

There are 2,472 products in which SADC has a comparative advantage. Of these, 463 products are in both the potential export basket to the world and the potential export basket to Africa, while 2,009 products are in only one of the baskets.

The major categories in the SADC potential export basket to the world are mineral oils and fuels; pearls, precious stones and metals; ores, slag and

ash; copper and its articles. In comparative terms, processed products make up the bulk of products in each potential export basket (to Africa, 38.1 per cent and, to the world, 33.7 per cent), thereby presenting opportunities for industrialization. On the other hand, the SADC comparative advantage to Africa is less limited to primary products (only 6.0 per cent), compared to 18.7 per cent to the world.

Table 35 compares products in the potential export baskets to Africa and to the world for Harmonized System two-digit codes 26 (ores, slag and ash) and 71 (natural and cultured pearl, precious and

Table 34: Top ten categories in the SADC potential export basket to the world (HS two-digit level)

HS 2	Chapter description	Sum of CTB 2016–2018 average	Sum of POS 2016–2018 average
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0.06586459	67.27104969
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	0.05025051	50.95368884
26	Ores, slag and ash	0.02594830	26.21243384
74	Copper and articles thereof	0.02033348	20.45674731
72	Iron and steel	0.01037455	10.44539960
08	Edible fruit and nuts; peel of citrus fruit or melons	0.00715725	7.23563963
81	Other base metals; cermets; articles thereof	0.00538772	5.39709744
76	Aluminium and articles thereof	0.00462267	4.71569995
24	Tobacco and manufactured tobacco substitutes	0.00381634	3.82932180
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.00366523	3.74117816

Source: ECA calculations based on UN Comtrade data.

semi-precious stones). Agglomerated and non-agglomerated iron ores and concentrates; ores of copper, nickel, cobalt, chromium and tungsten; dust and powder of diamonds; semi-manufactured silver; and unwrought gold all fall in both baskets. Examples of products limited to the potential export basket to the world include such products as ores and concentrates of manganese, lead, zinc, tin, uranium; unworked industrial diamonds; and coins and coins of legal tender. Examples that appear only in the potential export basket to Africa are molybdenum ores and concentrates; worked industrial diamonds; and worked industrial diamonds.

Of the products that are in both the potential export baskets to Africa and to the world, the major categories are fish and crustaceans, iron and steel, edible fruits and nuts, and organic chemicals. Value chains may be found in agroprocessing, with numerous opportunities in different subsectors and products, such as fish, vegetables, fruits and nuts. A majority of the agroprocessing products in the potential export baskets are classified as being mainly for household consumption. Nonetheless, they offer opportunities for value addition.

Table 35: Comparison of products under HS two-digit codes 26 and 71 in the SADC potential exports baskets to Africa and to the world

HS 6	Product description	World	Africa
260111	Non-agglomerated iron ores and concentrates (excluding roasted iron pyrites)	X	X
260112	Agglomerated iron ores and concentrates (excluding roasted iron pyrites)	X	X
260200	Manganese ores and concentrates, incl. ferruginous manganese ores and concentrates, with a ...	X	
260300	Copper ores and concentrates	X	X
260400	Nickel ores and concentrates	X	X
260500	Cobalt ores and concentrates	X	X
260700	Lead ores and concentrates	X	
260800	Zinc ores and concentrates	X	
260900	Tin ores and concentrates	X	
261000	Chromium ores and concentrates	X	X
261100	Tungsten ores and concentrates	X	X
261210	Uranium ores and concentrates	X	
261220	Thorium ores and concentrates	X	
261390	Molybdenum ores and concentrates (excluding roasted)		X
261400	Titanium ores and concentrates	X	
261510	Zirconium ores and concentrates	X	
261590	Niobium, tantalum or vanadium ores and concentrates	X	X
261610	Silver ores and concentrates	X	
261690	Precious-metal ores and concentrates (excluding silver ores and concentrates)	X	
261710	Antimony ores and concentrates	X	X
261790	Ores and concentrates (excluding iron, manganese, copper, nickel, cobalt, aluminium, lead, ...)	X	
261800	Granulated slag (slag sand) from the manufacture of iron or steel	X	
262030	Slag, ash and residues containing mainly copper	X	X
262040	Slag, ash and residues containing mainly aluminium	X	
262060	Slag, ash and residues, containing arsenic, mercury, thallium or their mixtures, of a kind ...		X
262091	Slag, ash and residues, containing antimony, beryllium, cadmium, chromium or their mixtures ...	X	X
262099	Slag, ash and residues, containing metals or metal compounds (excluding those from the manufacture ...)		X
710110	Pearls, natural, whether or not worked or graded, but not strung, mounted or set, natural pearls, ...		X
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted	X	
710229	Industrial diamonds, worked, but not mounted or set (excluding unmounted stones for pick-up ...)		X
710231	Non-industrial diamonds unworked or simply sawn, cleaved or bruted (excluding industrial diamonds)	X	X

HS 6	Product description	World	Africa
710239	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	X	
710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...	X	
710391	Rubies, sapphires and emeralds, worked, whether or not graded, but not strung, mounted or set, ...	X	
710399	Precious and semi-precious stones, worked, whether or not graded, but not strung, mounted or ...	X	X
710490	Precious and semi-precious stones, synthetic or reconstructed, worked, whether or not graded ...	X	
710510	Dust and powder of diamonds, incl. synthetic diamonds	X	X
710590	Dust and powder of natural or synthetic precious or semi-precious stones (excluding dust and ...	X	
710610	Powder of silver, incl. silver plated with gold or platinum		X
710692	Silver, incl. silver plated with gold or platinum, semi-manufactured	X	X
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...	X	X
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes	X	X
711011	Platinum, unwrought or in powder form	X	X
711019	Platinum, in semi-manufactured forms	X	
711021	Palladium, unwrought or in powder form	X	
711029	Palladium in semi-manufactured forms	X	
711031	Rhodium, unwrought or in powder form	X	
711039	Rhodium in semi-manufactured forms	X	
711041	Iridium, osmium and ruthenium, unwrought or in powder form	X	
711049	Iridium, osmium and ruthenium, in semi-manufactured forms	X	
711100	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	X	X
711230	Ash containing precious metal or precious-metal compounds	X	
711291	Waste and scrap of gold, incl. metal clad with gold, and other waste and scrap containing gold ...	X	
711292	Waste and scrap of platinum, incl. metal clad with platinum, and other waste and scrap containing ...	X	
711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing ...	X	
711311	Articles of jewellery and parts thereof, of silver, whether or not plated or clad with other ...		X
711319	Articles of jewellery and parts thereof, of precious metal other than silver, whether or not ...	X	X
711320	Articles of jewellery and parts thereof, of base metal clad with precious metal (excluding ...	X	
711411	Articles of goldsmiths' or silversmiths' wares or parts thereof, of silver, whether or not ...		X
711419	Articles of goldsmiths' or silversmiths' wares or parts thereof, of precious metal other than ...		X
711420	Articles of goldsmiths' or silversmiths' wares and parts thereof, of base metal clad with precious ...		X
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.	X	
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.		X
711719	Imitation jewellery, of base metal, whether or not plated with precious metal (excluding cuff ...		X
711790	Imitation jewellery (excluding jewellery, of base metal, whether or not clad with silver, gold ...		X
711810	Coin (excluding legal tender, gold coins, medals, jewellery made from coins, collectors' items ...	X	
711890	Coin of legal tender	X	

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

Table 36: Number of common products in the SADC potential export baskets to Africa and to the world

HS 2	Chapter description	No. of products
03	Fish and crustaceans, molluscs and other aquatic invertebrates	55
72	Iron and steel	23
08	Edible fruit and nuts; peel of citrus fruit or melons	21
29	Organic chemicals	20
20	Preparations of vegetables, fruit, nuts or other parts of plants	17
07	Edible vegetables and certain roots and tubers	16
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	15
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	14
44	Wood and articles of wood; wood charcoal	12
26	Ores, slag and ash	11
38	Miscellaneous chemical products	11
02	Meat and edible meat offal	10
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	10
22	Beverages, spirits and vinegar	10
41	Raw hides and skins (other than furskins) and leather	10
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	10
74	Copper and articles thereof	10
09	Coffee, tea, maté and spices	9
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	8
81	Other base metals; cermets; articles thereof	8

Source: ECA calculations based on UN Comtrade data.

3.2. Cross-community analysis

Table 37 summarizes the total number of products in the potential export baskets of each regional economic community to the world and to Africa, and also those that appear in both (same products) potential export baskets and those that appear in only one potential export basket (different).

Generally speaking, the number of products in the potential export basket to Africa is much higher than the number in the potential export basket to the world for all regional economic communities, with the exception of ECOWAS. This indicates that the continental market offers significant opportunity for African countries to diversify their trade. The types of products included in the communities' potential export baskets to Africa and those to the world also differ quite significantly, suggesting that comparative advantage is largely partner-specific.

The SADC potential export basket to Africa is more than twice the size of those of the other communi-

ties, comprising 2,117 products. This abundance is driven by South Africa, a large industrial economy in the region with diversified exports and a higher level of intra-community trade than the other regions. Similarly, the SADC potential export basket to the world includes more products than those of the other regional economic communities.

Of all the communities, ECCAS and ECOWAS have the smallest potential export baskets to Africa. This may be attributed, first, to the relatively low number of products in which the regions trade (based on data analysed in this study) and, second, to limited diversification in the products traded. Both regions rely heavily on petroleum exports.

There are a total of 4,077 products in which at least one regional economic community has a comparative advantage vis-à-vis Africa. There is only one product, however, in which all regions have a comparative advantage, namely, parts and accessories for instruments and appliances used in geodesy, topography, photogrammetrical surveying, ex-

Table 37: Number of products in the potential export baskets of the regional economic communities

	Number of products in PEB world	Number of products in PEB Africa	Number of same products in PEB world and PEB Africa	Number of different products in PEB world and PEB Africa
COMESA	802	1,110	465	982
EAC	693	1,041	365	1,004
ECCAS	156	500	103	450
ECOWAS	534	439	177	619
SADC	818	2,117	463	2,009
AMU	699	1,705	271	1,862

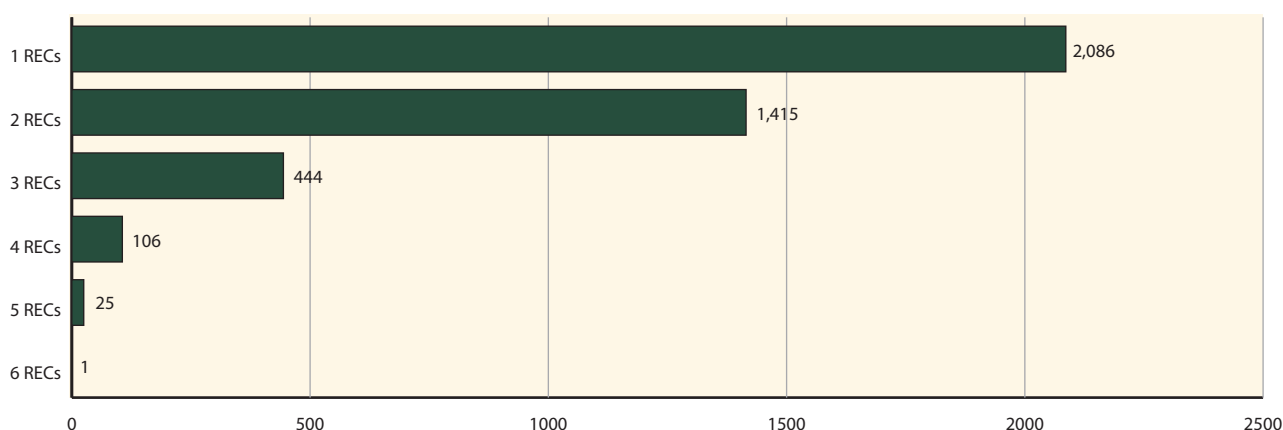
Source: ECA calculations based on UN Comtrade data.

cluding compasses and rangefinders. The majority of the products (2,086) are to be found in the potential export basket of only one regional economic community. Products which exhibit a comparative advantage in two of the six regional economic communities total 1,415. Of these, however, 218 are common between COMESA and SADC, while 119 are common between COMESA and EAC, communities with extensively overlapping membership. There are fewer products which are competitive for more than two regions. In all, 444 are competitive for three regional economic communities, 106 for four regions, and 25 for five regions. This reflects the pattern of intra-African trade, in which most products are traded within a single regional economic community, and much fewer among a multiplicity of communities.

In addition, this means that the potential export basket differs widely across the regional economic communities, which demonstrating the variability in comparative advantage across regions in specific products and, therefore, the significant potential

for boosting intra-African trade in the context of the African Continental Free Trade Area.

There are also opportunities for value chain development between the regional economic communities and across them all, given the overlap in value chain priorities identified, and also the different levels of value addition in the communities. Two examples are identified below, namely, precious stones and wood. For precious stones and gemstones, it is possible to develop an intercommunity value chain. There are four products classified as primary products (industrial diamonds; unworked precious and semi-precious stones; dust and powder of diamonds; and waste and scrap of silver) and produced in at least two regional economic communities. These can serve as inputs in the gemstones value chain and feed into the semi-manufacturing of base metals and precious stones. Final products in the value chain include articles of jewellery, articles of goldsmith or silversmith, and articles of precious stones.

Figure 7: Number of products included in the regional economic communities' export baskets

Source: ECA calculations based on UN Comtrade data.

Table 38: Comparison of top 20 HS two-digit categories in the communities' potential export baskets

HS 2	Chapter description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC
01	Live animals					X	
03	Fish and crustaceans, molluscs and other aquatic invertebrates	X					
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included				X		
07	Edible vegetables and certain roots and tubers		X	X			
08	Edible fruit and nuts; peel of citrus fruit or melons					X	X
09	Coffee, tea, maté and spices		X	X	X	X	
10	Cereals			X	X	X	
11	Products of the milling industry; malt; starches; inulin; wheat gluten			X	X		
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder					X	
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included			X			
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	X		X		X	
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	X				X	
17	Sugars and sugar confectionery	X	X				X
18	Cocoa and cocoa preparations				X		
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	X				X	
21	Miscellaneous edible preparations				X	X	X
22	Beverages, spirits and vinegar			X	X	X	X
23	Residues and waste from the food industries; prepared animal fodder		X	X	X	X	X
24	Tobacco and manufactured tobacco substitutes		X	X			X
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	X		X			
26	Ores, slag and ash		X				X
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	X		X	X	X	X
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	X	X			X	
31	Fertilisers	X					
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations		X			X	X
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modelling pastes, dental waxes and dental preparation			X	X	X	
38	Miscellaneous chemical products		X				X
39	Plastics and articles thereof	X	X	X	X	X	X
44	Wood and articles of wood; wood charcoal		X		X		
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	X					X
52	Cotton		X			X	
61	Articles of apparel and clothing accessories, knitted or crocheted		X				

HS 2	Chapter description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC
62	Articles of apparel and clothing accessories, not knitted or crocheted	X	X				
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags			X			
64	Footwear, gaiters and the like; parts of such articles	X					
70	Glass and glassware			X	X		
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin		X	X	X	X	X
72	Iron and steel	X	X	X	X		X
73	Articles of iron or steel	X		X			X
74	Copper and articles thereof		X				
76	Aluminium and articles thereof				X		X
79	Zinc and articles thereof					X	
81	Other base metals; cermet; articles thereof		X				X
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	X			X		X
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	X	X		X		X
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	X			X		X
89	Ships, boats and floating structures				X	X	
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	X					
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated nameplates and the like; prefabricated buildings	X		X			
99	Works of art, collectors' pieces and antiques		X	X			

Source: ECA calculations based on UN Comtrade data.

For wood and wood products, primary products from various regions include coniferous wood; tropical wood; oak; eucalyptus and hoopwood, among others. The next level of processed goods include sawn or chipped coniferous wood; plywood; laminated wood; and veneering wood. This

value chain offers immense opportunities for linkages with other sectors, for example, processed wood for railway or tram sleepers and doors and door frames for construction.

Table 39: Potential for the intercommunity value chain in gemstones

HS 6	Product description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC	BEC
710221	Industrial diamonds unworked or simply sawn, cleaved or bruted	-	1	-	1	-	-	Primary
710229	Industrial diamonds, worked, but not mounted or set (excluding unmounted stones for pick-up ...)	-	1	-	-	-	1	Processed
710310	Precious stones and semi-precious stones, unworked or simply sawn or roughly shaped, whether ...	-	1	1	1	-	-	Primary
710399	Precious and semi-precious stones, worked, whether or not graded, but not strung, mounted or ...	-	1	1	-	-	1	Processed
710510	Dust and powder of diamonds, incl. synthetic diamonds	1	-	-	-	-	1	Primary
710610	Powder of silver, incl. silver plated with gold or platinum	-	-	1	-	-	1	Processed
710692	Silver, incl. silver plated with gold or platinum, semi-manufactured	-	1	-	-	-	1	Processed
710811	Gold, incl. gold plated with platinum, for non-monetary purposes	-	1	-	1	-	-	Processed
710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excluding gold ...)	-	1	1	1	1	1	Processed
710813	Gold, incl. gold plated with platinum, in semi-manufactured forms, for non-monetary purposes	-	1	-	-	1	1	Processed
711011	Platinum, unwrought or in powder form	-	1	-	-	-	1	Processed
711100	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	-	1	-	-	1	1	Processed
711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing ...	-	1	-	1	-	-	Primary
711319	Articles of jewellery and parts thereof, of precious metal other than silver, whether or not ...	-	1	-	-	-	1	Durable
711411	Articles of goldsmiths' or silversmiths' wares or parts thereof, of silver, whether or not ...	-	1	-	1	-	1	Durable
711419	Articles of goldsmiths' or silversmiths' wares or parts thereof, of precious metal other than ...	1	1	-	-	-	1	Durable
711420	Articles of goldsmiths' or silversmiths' wares and parts thereof, of base metal clad with precious ...	1	-	-	-	-	1	Durable
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.	1	1	-	-	-	1	Durable

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

BEC: broad economic category.

Table 40: Potential of the intercommunity value chain in wood and timber

HS 6	Product description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC	BEC
440110	Fuel wood, in logs, billets, twigs, faggots or similar forms	-	1	-	-	-	1	Primary
440121	Coniferous wood in chips or particles (excluding those of a kind used principally for dyeing ...)	-	1	-	1	1	-	Primary
440139	Sawdust and wood waste and scrap, whether or not agglomerated in logs, briquettes or similar ...	-	1	1	1	-	1	Primary
440210	Bamboo charcoal, incl. shell or nut charcoal, whether or not agglomerated (excluding used as ...)	-	1	1	-	-	1	Other
440349	Tropical wood specified in the Subheading Note 1 to this chapter in the rough, whether or not ...	-	1	-	1	-	-	Primary
440391	Oak "Quercus spp." in the rough, whether or not stripped of bark or sapwood, or roughly squared ...	-	-	-	-	1	1	Primary
440398	Eucalyptus "Eucalyptus spp." in the rough, whether or not stripped of bark or sapwood, or roughly ...	-	-	1	-	1	-	Primary
440399	Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared (excluding ...)	-	1	-	1	-	-	Primary
440420	Hoopwood; split poles; piles, pickets and stakes of wood, pointed but not sawn lengthwise; ...	-	1	1	-	-	1	Primary
440611	Railway or tramway sleepers (cross-ties) of wood, not impregnated, coniferous	-	1	-	-	-	1	Processed
440710	Coniferous wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded ...	-	1	-	-	-	1	Processed
440719	Coniferous wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded ...	-	1	-	-	1	1	Processed
440721	Mahogany "Swietenia spp."; sawn or chipped lengthwise, sliced or peeled, whether or not planed, ...	-	-	-	-	1	1	Processed
440726	White lauan, white meranti, white seraya, yellow meranti and alan, sawn or chipped lengthwise, ...	-	1	-	-	1	-	Processed

HS 6	Product description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC	BEC
440728	Iroko, sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, ...	-	1	-	1	1	-	Processed
440729	Tropical wood specified in Subheading Note 1 to this chapter, sawn or chipped lengthwise, sliced ...	-	1	-	1	-	-	Processed
440810	Sheets for veneering, incl. those obtained by slicing laminated wood, for coniferous plywood ...	-	1	1	1	1	-	Processed
440839	Sheets for veneering, incl. those obtained by slicing laminated wood, for plywood or for other ...	-	-	-	1	1	-	Processed
440890	Sheets for veneering, incl. those obtained by slicing laminated wood, for plywood or for other ...	-	-	-	1	1	-	Processed
440910	Coniferous wood, incl. strips and friezes for parquet flooring, not assembled, continuously ...	-	1	-	-	1	-	Processed
441012	Oriented strand board (OSB) of wood	1	-	-	-	-	1	Processed
441210	Plywood, veneered panel and similar laminated wood, of bamboo, not containing particle board ...	1	1	1	1	1	-	Processed
441231	Plywood consisting solely of sheets of wood <= 6 mm thick, with at least one outer ply of tropical ...	-	1	-	1	1	-	Processed
441239	Plywood consisting solely of sheets of wood <= 6 mm thick (excluding of bamboo, plywood of ...)	-	1	1	-	-	-	Processed
441299	Laminated wood without blockboard, laminboard or battenboard (excluding of bamboo, plywood ...)	-	-	1	-	1	1	Processed
441510	Cases, boxes, crates, drums and similar packings, of wood; cable-drums of wood	1	-	1	-	-	1	Processed
441520	Pallets, box pallets and other load boards, of wood; pallet collars of wood (excluding containers ...)	1	-	-	1	1	-	Processed
441820	Doors and their frames and thresholds, of wood	1	-	-	-	-	1	Processed
441840	Wooden shuttering for concrete constructional work (excluding plywood boarding)	1	-	-	-	-	1	Processed

HS 6	Product description	AMU	COMESA	EAC	ECCAS	ECOWAS	SADC	BEC
441899	Builders' joinery and carpentry, of wood, incl. cellular wood panels (excl. of bamboo, windows, ...)	1	-	-	-	-	1	Processed
441900	Tableware and kitchenware, of wood (excluding interior fittings, ornaments, cooperage products, ...)	1	1	-	-	-	-	Semi-durable
441911	Bread boards, chopping boards and similar boards, of bamboo	1	1	-	-	-	-	Semi-durable
441919	Tableware and kitchenware, of bamboo (excl. chopsticks, bread boards, chopping boards and similar ...)	1	-	-	-	-	1	Semi-durable
441990	Tableware and kitchenware, of wood other than bamboo (excl. interior fittings, ornaments, cooper's ...)	1	-	-	-	-	1	Semi-durable
442010	Statuettes and other ornaments, of wood (excluding wood marquetry and inlaid wood)	-	-	1	-	1	-	Semi-durable
442110	Clothes hangers of wood	1	-	1	-	-	-	Semi-durable
442190	Other articles of wood, n.e.s.	1	1	-	-	1	-	Processed
442199	Articles of wood, n.e.s.	1	-	-	-	-	1	Processed

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

BEC: broad economic category.

4. Priority regional value chains in Africa

The ambitious tariff liberalization envisaged under the African Continental Free Trade Area will boost incentives to source inputs and intermediates from within Africa and this, in turn, is expected to support the expansion of manufacturing sectors and enhance the productivity of African goods and services. There is therefore need to develop competitive regional value chains and to position the continent so that it is better integrated into global value chains and benefits more from the global trading system.

This study has demonstrated that most intra-African trade and regional value chains are currently concentrated within the various regional economic communities. The African Continental Free Trade Area quality policy and standards harmonization agenda offers an opportunity to support the development of wider regional value chains that extend across the continent. The present chapter aims to offer guidance on potential priority African value

chains by looking at where there are overlaps in priority value chains identified through the analysis of communities' potential export baskets at the product level. Products and value chains identified in the potential export basket of two or more communities also point to natural priorities for standards harmonization negotiations, since their significance and contribution are important across all the regional economic communities. The analysis takes into account forward and backward linkages, and cross-sectoral interactions.

The previous potential export basket analysis at product level was also used to identify priority regional value chains. The results indicate that there is significant overlap in the identified priority regional value chains for the regional economic communities, although the overlap is minimal at product level. A comparison of only the top 20 categories grouped according to the Harmonized System two-digit level shows that the agroprocess-

Table 41: Summary of communities' priority value chains in Africa

AMU	COMESA	EAC	ECCAS	ECOWAS	SADC
Fish processing	Agroprocessing, including vegetables, tea, sugar	Agroprocessing including vegetables, tea, cereals, beverages and spirits	Agroprocessing including dairy, coffee, tea, cereals, cocoa, beverages and spirits,	Agroprocessing including fruits and nuts, coffee and tea, edible oils, cereals, beverages and vinegar	Agroprocessing including fruits and nuts, sugar, beverages and spirits
Edible oils		Cement	Mineral oils	Mineral fuels	Mineral fuels
Cement	Minerals beneficiation including copper, cobalt, nickel, etc	Precious stones	Wood and wood products	Essential oils	Precious stones
Minerals beneficiation		Mineral oils	Precious stones	Cotton	Iron steel
Fertilizer	Wood and wood products	Iron and steel	Iron and steel	Precious stones	Automobile
Textiles	Mineral oils	Creative economy	Automobile	Ships and boats*	
Iron and steel	Cotton and textiles		Ships and boats*		
Automobile	Iron and steel				
	Precious stones				
	Creative economy				

Source: ECA calculations based on UN Comtrade data.

* The case for these priority value chains is driven by the Congo in ECCAS and Nigeria in ECOWAS.

ing value chain cuts across all regional economic communities. As may be expected, however, there are some differences in the particular products for each community. For example, vegetable oils are key for COMESA and EAC; tea for COMESA, EAC, ECCAS and ECOWAS; edible oils for ECOWAS and AMU. Other similar value chains across the regions include mineral oils, precious stones iron and steel.

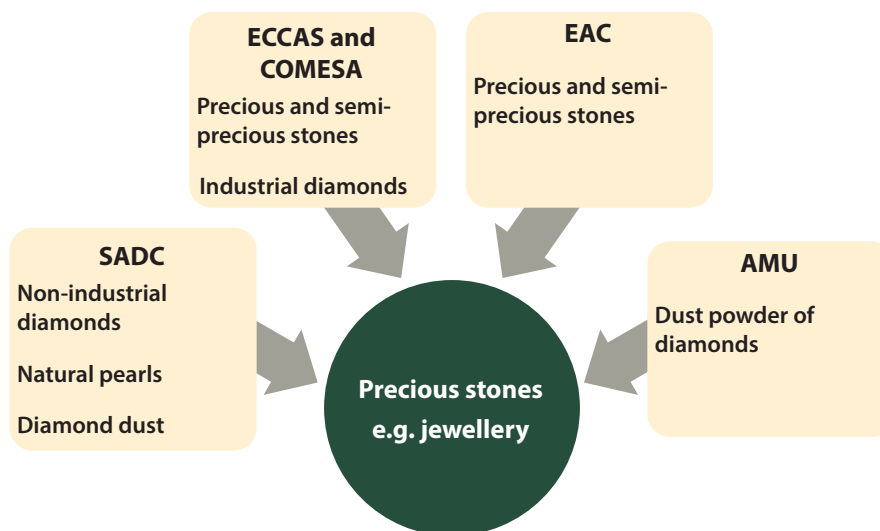
The priorities identified above for agroprocessing in large part tally with the Feed Africa Strategy for Agricultural Transformation in Africa 2016–2025 of the African Development Bank (African Development Bank, 2016). The strategy identifies critical agricultural value chains that can help the continent achieve self-sufficiency in key staples; gain a fair share of export-oriented commodity value chains; create African capability to serve consumer demand and nutrition needs; and leverage the potential of untapped or under-tapped regions. The priority value chains that can be used to achieve these aims are identified as cereals, such as rice, maize and sorghum; horticulture; cashew nuts; fish; and poultry. The Technologies for African Agricultural Transformation programme of the Consultative Group on International Agricultural Research (CGIAR) also prioritizes coffee, cocoa, cashew nuts,

cotton, palm oil, horticulture and fish as key agricultural value chains across Africa. These priorities coincide with those identified in this study, as indicated by table 41 above.

Some of the value chains provide linkages to other sectors. Iron and steel, for example, can feed into the automobile and construction sectors through such products as steel and stainless steel for the manufacture of various car parts; and steel and iron bars for the construction sector. The same applies to the textiles sector, in that cotton has forward linkages to textiles.

At the product level, various products can be sourced from different regional economic communities. In precious stones, for example, regional economic communities can provide the following primary products or inputs into the precious stones: SADC – non-industrial diamonds, natural pearls and diamond dust; ECCAS and COMESA – precious and semi-precious stones and industrial diamonds; EAC – precious and semi-precious stones; and AMU – dust powder of diamonds. Each of the regions has some level of processing, producing such products as articles of jewellery, and goldsmiths’ and silver-smiths’ wares.

Figure 8: Regional economic community inputs into the precious stones value chain



Source: ECA.

5. Priority products for standards harmonization

The aim in this chapter is to identify priority products for standards harmonization in Africa, based on an analysis of all regional economic community potential export baskets, which indicate opportunities for intra-African trade. Only products that have a comparative advantage and are competitive in at least two communities are analysed, however. Those with a comparative advantage in only one community are excluded because of a high likelihood that they are traded primarily within that community. A total of 1,991 products (out of 6,305) are analysed and compared against the harmonized standards in each regional economic community.

The products in the potential export baskets are then compared against the catalogues or lists of harmonized standards in each regional economic community, to identify those products for which standards already exist; this is because, as argued earlier, existing community-level harmonized standards can offer a basis for the harmonization of continental standards.

It is important to note that a comprehensive analysis was limited by the availability of information, relating specifically to the catalogues or lists of harmonized standards. The ECOWAS list (see box 3), for example, only includes standards that were harmonized in 2017, thus it was not possible to review the products against ECOWAS standards harmonized before and after 2017. In addition, with the exception of the catalogue of East African standards (see box 2), the information is in the form of lists which only broadly identify the product to which a standard applies (see boxes 1, 3 and 4). As a result, in some cases, it is difficult to identify all products to which the standards apply. The EAC catalogue also provides details of the relevant Harmonized System codes for the products. Lists or catalogues for AMU and ECCAS were not available at the time of analysis, thus they are not included in this chapter.

The above considerations notwithstanding, only a few products have standards harmonized in at least one regional economic community. Three quarters of the 1,991 products analysed have no standards harmonized at community level. Only two products, both of cement, have standards harmonized in each of the four regional economic communities. A total of 15 products have standards harmonized in three communities, 103 in three communities and 349 in one community.

The majority of the products for which standards are harmonized at the community level fall within the categories of fish products; agricultural products like fruits, vegetables and cereals; textiles; and iron and steel. These offer a starting point in the process of standards harmonization as Africa prepares for increased movement of goods across the regions.

Priority products for standards harmonization include the following:

- » Portland cement
- » Fish
- » Milk and milk products
- » Fruits, including fruit juices such as pineapples, avocado, guavas, mangoes and oranges
- » Edible oils such as palm oils
- » Cereals, including rice, wheat, maize, sorghum
- » Automobiles
- » Mineral water

A more detailed list of the priorities at the Harmonized System six-digit level may be found in table 42 below. Priority products for standards harmonization are products which have both a comparative advantage in at least two regional economic communities and an existing harmonized standard in at least two communities.

Table 42: Priority products for standards harmonization

HS 6	Product description	COMESA	EAC	ECOWAS	SADC
252321	White Portland cement, whether or not artificially coloured	x	x	x	x
252390	Cement, whether or not coloured (excluding Portland cement and aluminous cement)	x	x	x	x
030243	Fresh or chilled sardines "Sardina pilchardus, Sardinops spp.", sardinella "Sardinella spp.", ...	x	x	N/A	x
030419	Fresh or chilled fillets and other fish meat whether or not minced" (excluding swordfish and ...	x	x	N/A	x
030431	Fresh or chilled fillets of tilapia "Oreochromis spp."	x	x	N/A	x
030433	Fresh or chilled fillets of Nile perch "Lates niloticus"	x	x	N/A	x
030439	Fresh or chilled fillets of carp "Cyprinus carpio, Carassius carassius, Ctenopharyngodon idellus, ...	x	x	N/A	x
030446	Fresh or chilled fillets of toothfish "Dissostichus spp."	x	x	N/A	x
030449	Fresh or chilled fillets of fish, n.e.s.	x	x	N/A	x
030451	Fresh or chilled meat, whether or not minced, of tilapia "Oreochromis spp.", catfish "Pangasius ...	x	x	N/A	x
030459	Fresh or chilled fish meat, whether or not minced (excluding all fillets, tilapias, catfish, ...	x	x	N/A	x
030489	Frozen fish fillets, n.e.s.	x	x	N/A	x
030616	Frozen cold-water shrimps and prawns "Pandalus spp., Crangon crangon", even smoked, whether ...	x	x	N/A	x
120210	Groundnuts in shell, not roasted or otherwise cooked	x	x	x	N/A
120241	Groundnuts, in shell (excluding seed for sowing, roasted or otherwise cooked)	x	x	x	N/A
120242	Groundnuts, shelled, whether or not broken (excluding seed for sowing, roasted or otherwise ...	x	x	x	N/A
252330	Aluminous cement	x	x	x	N/A
030212	Fresh or chilled Pacific salmon <i>Oncorhynchus nerka</i> , <i>Oncorhynchus gorbuscha</i> , <i>Oncorhynchus keta</i> , ...	N/A	x	N/A	x
030219	Fresh or chilled salmonidae (excluding trout "Salmo trutta", <i>Oncorhynchus mykiss</i> , <i>Oncorhynchus</i> ...	N/A	x	N/A	x
030221	Fresh or chilled lesser or Greenland halibut "Reinhardtius hippoglossoides, Atlantic halibut ...	N/A	x	N/A	x
030231	Fresh or chilled albacore or longfinned tunas "Thunnus alalunga"	N/A	x	N/A	x
030244	Fresh or chilled mackerel "Scomber scombrus, Scomber australasicus, Scomber japonicus"	N/A	x	N/A	x
030249	Fresh or chilled Indian mackerels "Rastrelliger spp.", seerfishes "Scomberomorus spp.", jacks, ...	N/A	x	N/A	x
030259	Fresh or chilled fish of the families Bregmacerotidae, Eulichthyidae, Gadidae, Macrouridae, ...	N/A	x	N/A	x
030267	Fresh or chilled swordfish (<i>Xiphias gladius</i>)	N/A	x	N/A	x
030269	Fresh or chilled freshwater and saltwater fish (excluding salmonidae, flat fish, tunas, skipjack ...	N/A	x	N/A	x
030272	Fresh or chilled catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus spp."	N/A	x	N/A	x
030273	Fresh or chilled carp "Cyprinus carpio, Carassius carassius, Ctenopharyngodon idellus, Hypophthalmichthys ...	N/A	x	N/A	x
030279	Fresh or chilled, Nile perch "Lates niloticus" and snakeheads "Channa spp."	N/A	x	N/A	x
030289	Fresh or chilled fish, n.e.s.	N/A	x	N/A	x
030353	Frozen sardines "Sardina pilchardus, Sardinops spp.", sardinella "Sardinella spp.", brisling ...	x	x	N/A	N/A
030469	Frozen fillets of carp "Cyprinus carpio, Carassius carassius, Ctenopharyngodon idellus, Hypophthalmichthys ...	x	x	N/A	N/A
030530	Fish fillets, dried, salted or in brine, not smoked	N/A	x	N/A	x

HS 6	Product description	COMESA	EAC	ECOWAS	SADC
030539	Fish fillets, dried, salted or in brine, but not smoked (excluding tilapia, catfish, carp, ...)	N/A	x	N/A	x
030544	Smoked tilapia "Oreochromis spp.", catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus ...	N/A	x	N/A	x
030552	Dried tilapia "Oreochromis spp.", catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus ...	N/A	x	N/A	x
030559	Dried fish, even salted but not smoked (excluding fillets, offal and cod)	N/A	x	N/A	x
030614	Frozen crabs, even smoked, whether in shell or not, incl. crabs in shell, cooked by steaming ...	N/A	x	N/A	x
030636	Shrimps and prawns, whether in shell or not, live, fresh or chilled (excl. cold-water shrimps ...)	N/A	x	N/A	x
030719	Oysters, smoked, frozen, dried, salted or in brine	N/A	x	N/A	x
030721	Live, fresh or chilled, scallops, incl. queen scallops, of the genera Pecten, Chlamys or Placopecten, ...	N/A	x	N/A	x
030741	Live, fresh or chilled, not smoked, cuttle fish "Sepia officinalis, Rossia macrosoma, Sepiola ...	N/A	x	N/A	x
030890	Live, fresh, chilled, frozen, dried, salted or in brine, even smoked, aquatic invertebrates ...	N/A	x	N/A	x
040110	Milk and cream of a fat content by weight of <= 1%, not concentrated nor containing added sugar ...	x	x	N/A	N/A
040140	Milk and cream of a fat content by weight of > 6% but <= 10%, not concentrated nor containing ...	x	x	N/A	N/A
040221	Milk and cream in solid forms, of a fat content by weight of > 1,5%, unsweetened	x	x	N/A	N/A
040229	Milk and cream in solid forms, of a fat content by weight of > 1,5%, sweetened	x	x	N/A	N/A
040291	Milk and cream, concentrated but unsweetened (excluding in solid forms)	x	x	N/A	N/A
040299	Milk and cream, concentrated and sweetened (excluding in solid forms)	x	x	N/A	N/A
040310	Yogurt, whether or not flavoured or containing added sugar or other sweetening matter, fruits, ...	x	x	N/A	N/A
071310	Dried, shelled peas "Pisum sativum", whether or not skinned or split	x	x	N/A	N/A
071332	Dried, shelled small red "Adzuki" beans "Phaseolus or Vigna angularis", whether or not skinned ...	x	x	N/A	N/A
071333	Dried, shelled kidney beans "Phaseolus vulgaris", whether or not skinned or split	x	x	N/A	N/A
071340	Dried, shelled lentils, whether or not skinned or split	x	x	N/A	N/A
071350	Dried, shelled broad beans "Vicia faba var. major" and horse beans "Vicia faba var. equina ...	x	x	N/A	N/A
080390	Fresh or dried bananas (excluding plantains)	x	x	N/A	N/A
080430	Fresh or dried pineapples	x	x	N/A	N/A
080440	Fresh or dried avocados	x	x	N/A	N/A
080450	Fresh or dried guavas, mangoes and mangosteens	x	x	N/A	N/A
080510	Fresh or dried oranges	x	x	N/A	N/A
080521	Fresh or dried mandarins incl. tangerines and satsumas (excl. clementines)	x	x	N/A	N/A
080529	Fresh or dried wilkings and similar citrus hybrids	x	x	N/A	N/A
080720	Fresh pawpaws "papayas"	x	x	N/A	N/A
100700	Grain sorghum	x	x	N/A	N/A
110100	Wheat or meslin flour	x	x	N/A	N/A
110220	Maize "corn" flour	N/A	x	x	N/A
110290	Cereal flours (excluding wheat, meslin and maize)	x	x	N/A	N/A
151110	Crude palm oil	x	x	N/A	N/A

HS 6	Product description	COMESA	EAC	ECOWAS	SADC
151190	Palm oil and its fractions, whether or not refined (excluding chemically modified and crude)	x	x	N/A	N/A
151219	Sunflower-seed or safflower oil and their fractions, whether or not refined, but not chemically ...	x	x	N/A	N/A
151229	Cotton-seed oil and its fractions, whether or not refined, but not chemically modified (excluding ...	x	x	N/A	N/A
151329	Palm kernel and babassu oil and their fractions, whether or not refined, but not chemically ...	x	x	N/A	N/A
151590	Fixed vegetable fats and oils and their fractions, whether or not refined, but not chemically ...	x	x	N/A	N/A
151710	Margarine (excluding liquid)	x	x	N/A	N/A
151800	Animal or vegetable fats and oils and their fractions, boiled, oxidised, dehydrated, sulphurized, ...	x	x	N/A	N/A
170113	Raw cane sugar, in solid form, not containing added flavouring or colouring matter, obtained ...	x	x	N/A	N/A
170114	Raw cane sugar, in solid form, not containing added flavouring or colouring matter (excluding ...	x	x	N/A	N/A
170191	Refined cane or beet sugar, containing added flavouring or colouring, in solid form	x	x	N/A	N/A
170219	Lactose in solid form and lactose syrup, not containing added flavouring or colouring matter, ...	x	x	N/A	N/A
170260	Fructose in solid form and fructose syrup, not containing added flavouring or colouring matter ...	x	x	N/A	N/A
170290	Sugars in solid form, incl. invert sugar and chemically pure maltose, and sugar and sugar syrup ...	x	x	N/A	N/A
190110	Food preparations for infant use, put up for retail sale, of flour, groats, meal, starch or ...	x	x	N/A	N/A
200811	Groundnuts, prepared or preserved (excluding preserved with sugar)	N/A	x	x	N/A
200912	Orange juice, unfermented, Brix value <= 20 at 20°C, whether or not containing added sugar ...	x	x	N/A	N/A
200931	Single citrus fruit juice, unfermented, Brix value <= 20 at 20°C, whether or not containing ...	x	x	N/A	N/A
200941	Pineapple juice, unfermented, Brix value <= 20 at 20°C, whether or not containing added sugar ...	x	x	N/A	N/A
200949	Pineapple juice, unfermented, Brix value > 20 at 20°C, whether or not containing added sugar ...	x	x	N/A	N/A
200950	Tomato juice, unfermented, whether or not containing added sugar or other sweetening matter ...	x	x	N/A	N/A
200990	Mixtures of fruit juices, incl. grape must, and vegetable juices, unfermented, whether or not ...	x	x	N/A	N/A
220110	Mineral waters and aerated waters, not containing added sugar, other sweetening matter or flavoured	x	x	N/A	N/A
220210	Waters, incl. mineral and aerated, with added sugar, sweetener or flavour, for direct consumption ...	x	x	N/A	N/A
250100	Salts, incl. table salt and denatured salt, and pure sodium chloride, whether or not in aqueous ...	x	x	N/A	N/A
320810	Paints and varnishes, incl. enamels and lacquers, based on polyesters, dispersed or dissolved ...	N/A	x	x	N/A
320890	Paints and varnishes based, incl. enamels and lacquers, on synthetic polymers or chemically ...	N/A	x	x	N/A
320910	Paints and varnishes, incl. enamels and lacquers, based on acrylic or vinyl polymers, dispersed ...	N/A	x	x	N/A
340211	Anionic organic surface-active agents, whether or not put up for retail sale (excluding soap)	x	x	N/A	N/A
340219	Organic surface-active agents, whether or not put up for retail sale (excluding anionic, cationic ...	x	x	N/A	N/A
340290	Surface-active preparations, washing preparations, incl. auxiliary washing preparations and ...	x	x	N/A	N/A

HS 6	Product description	COMESA	EAC	ECOWAS	SADC
401211	Retreaded pneumatic tyres, of rubber, of a kind used on motor cars "incl. station wagons and ...	N/A	x	N/A	x
401212	Retreaded pneumatic tyres, of rubber, of a kind used on buses or lorries	N/A	x	N/A	x
440110	Fuel wood, in logs, billets, twigs, faggots or similar forms	x	x	N/A	N/A
440121	Coniferous wood in chips or particles (excluding those of a kind used principally for dyeing ...	x	x	N/A	N/A
440139	Sawdust and wood waste and scrap, whether or not agglomerated in logs, briquettes or similar ...	x	x	N/A	N/A
440710	Coniferous wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded ...	x	x	N/A	N/A
530310	Jute and other textile bast fibres, raw or retted (excluding flax, true hemp and ramie)	x	x	N/A	N/A
530390	Jute and other textile bast fibres, processed but not spun; tow and waste of such fibres, incl. ...	x	x	N/A	N/A
721430	Bars and rods, of non-alloy free-cutting steel, not further worked than hot-rolled, hot-drawn ...	x	x	N/A	N/A
730830	Doors, windows and their frames and thresholds for doors, of iron or steel	N/A	x	N/A	x
850860	Vacuum cleaners, incl. dry cleaners and wet vacuum cleaners (excluding with self-contained ...	N/A	x	N/A	x
851672	Electric toasters, for domestic use	N/A	x	N/A	x
853620	Automatic circuit breakers for a voltage <= 1.000 V	N/A	x	N/A	x
854419	Winding wire for electrical purposes, of material other than copper, insulated	x	x	N/A	N/A
854449	Electric conductors, for a voltage <= 1.000 V, insulated, not fitted with connectors, n.e.s.	x	x	N/A	N/A
854470	Optical fibre cables made up of individually sheathed fibres, whether or not containing electric ...	x	x	N/A	N/A
870324	Motor cars and other motor vehicles principally designed for the transport of persons, incl. ...	N/A	x	N/A	x
870331	Motor cars and other motor vehicles principally designed for the transport of persons, incl. ...	N/A	x	N/A	x
870333	Motor cars and other motor vehicles principally designed for the transport of persons, incl. ...	N/A	x	N/A	x
870350	Motor cars and other motor vehicles principally designed for the transport of ...	N/A	x	N/A	x
870370	Motor cars and other motor vehicles principally designed for the transport of ...	N/A	x	N/A	x
870390	Motor cars and other vehicles principally designed for the transport of persons, incl. station ...	N/A	x	N/A	x

Source: ECA calculations based on UN Comtrade data.

n.e.s.: not elsewhere specified.

6. Conclusion and recommendations

The Agreement Establishing the African Continental Free Trade Area is wide-ranging in scope, covering not only trade in goods, but also trade in services, investment, intellectual property rights and competition policy. This design reflects an explicit decision of African policymakers to enable trade and investment to support industrialization. The industrialization and trade potential of the African Continental Free Trade Area, however, cannot be realized without adequate quality infrastructure systems including metrology, standardization, accreditation, quality management and conformity assessment. Compliance with standards and technical regulations is important for signalling and guaranteeing the quality of produced and traded goods. This helps to encourage trade and industrialization.

For this reason, the Agreement contains provisions on technical barriers to trade and sanitary and phytosanitary measures. Among other processes, they require the elimination of unnecessary and unjustifiable technical barriers to trade through reinforcing international best practices, harmonizing standards and ensuring equivalence in technical regulations, metrology, accreditation and conformity assessment. The harmonization of standards is a laborious task that requires extensive, costly and lengthy negotiations. This means that it will not be possible to harmonize all standards at once, and highlights the need for a well-informed and appropriate prioritization strategy to maximize the impact of standards harmonization in the framework of the African Continental Free Trade Area.

This study has attempted to identify potential value chains and priorities for standards harmonization using a framework consisting of a number of different techniques. These are, first, the identification of most commonly traded goods; second, the estimation of the potential export basket; and, third, the review of regional economic community industrialization priorities and harmonized standards catalogues. The analysis was carried out in respect of six African regional economic communities, namely, AMU, COMESA, EAC, ECCAS, ECOWAS and SADC.

Key findings

- » A large proportion of African trade takes place with the rest of the world. For all African regional economic communities, more than 60 per cent of exports are destined for markets outside the continent, and more than 80 per cent of imports originate from outside the continent. Three out of the continent's top four imports from the rest of the world are petroleum products, with values above \$10 billion each. In all, 36.5 per cent of imports to Africa from the rest of the world are processed goods, indicating that Africa is heavily reliant on goods manufactured or processed outside the continent.
- » Intra-African exports amounted to an average of \$70.87 billion for the period 2016–2018. On average, only some 19 per cent of African exports were destined for other African countries, and the majority of these exports were concentrated within a given regional economic community. The African Continental Free Trade Area offers an opportunity for regional economic communities to tap into under-exploited export markets in other African countries outside their regional groupings.
- » Intra-African imports contributed on average even less to total African imports (only 14.3 per cent), and similarly, a large share of these imports originated from within the same community (on average, 49.3 per cent). The African Continental Free Trade Area offers an opportunity for regional economic communities to import inputs and intermediates from African countries outside their region and to develop African regional value chains that are not confined to existing regional groupings. Harmonizing standards and technical regulations across African countries will be crucial to supporting African countries in their efforts to tap into these opportunities.

- » The top exports in Africa are mainly agricultural or mineral products. For all the regional economic communities studied, there are overlaps between the products exported within the community, to other countries in Africa and to elsewhere in the world. In addition, on the whole, there is broad convergence between the top ten exports from each regional economic community with their self-identified priorities for industrialization and value chain development.
- » All the regional economic communities, with the exception of ECOWAS, have larger potential export baskets to Africa (PEB Africa) than to the rest of the world (PEB world), indicating that they are more competitive within the continent than in the rest of the world. All the communities have a comparative advantage in most of their self-identified priority products for industrialization and value addition. Africa has a more diversified comparative advantage within Africa than with the rest of the world, since it is constituted by fewer primary products.
- » The continental standards harmonization process should be based on value chain priorities that are common across regional economic communities and that offer potential for strong forward and backward linkages. According to the potential export basket analysis, these include mineral oils, precious stones, iron and steel and agro-processing. Specific subsectors under agro-processing include tea, sugar, coffee, vegetables, cereals, beverages and spirits.
- » At the product level, the existing standards harmonization catalogues of the various regional economic communities should offer a basis for identifying priority products for standards harmonization at the continental level.
- » The continental standards harmonization process should prioritize products in which at least two regional economic communities have a comparative advantage and for which standards already exist in at least two such communities. According to this approach, priority products for standards harmonization should include Portland cement, fish, milk and milk products, fruits and fruit juices, edible oils such as palm oils, and cereals, including rice, wheat, maize and sorghum.

Key recommendations

- » In view of the more diversified and industrialized nature of intra-African trade and its comparative advantage (compared to the trade and comparative advantage of Africa with the rest of the world), implementation of the Agreement Establishing the African Continental Free Trade Area should be fast-tracked and supported by complementary measures to address existing constraints to trade and industrialization.
- » The harmonization of standards across the continent will be crucial to supporting realization of the trade and industrialization potential of the African Continental Free Trade Area and should therefore be given significant priority in the implementation of the Agreement.
- » The harmonization process should build upon existing international or regional (best practice) standards.
- » Regional-level programmes should be developed to articulate and promote the implementation of regional value chains. Regional economic communities can enter value chains at different levels, and the chains must be well understood in order to facilitate meaningful participation in them.
- » To facilitate the continental standards harmonization process, there is need to update the communities' lists and catalogues of harmonized standards. In particular, use of the harmonized text of these standards would be of considerable assistance in defining the scope and applicability of the standard and ensuring comparability across regional economic communities.

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