Standing Committee
for Economic and Commercial Cooperation
of the Organization of Islamic Cooperation (COMCEC)

COMCEC

Reviewing Agricultural Trade Policies To Promote Intra-OIC Agricultural Trade

COMCEC COORDINATION OFFICE
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Table of Contents

List of Tables

List of Figures

List of Abbreviations

AD	Anti-Dumping
ANRP	Agriculture and Natural Resource Policy (Gambia)
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
AVE	Ad Valorem Equivalent
BACI	Base pour L'Analyse du Commerce International Database for International Trade Analyzes
C-4	Cotton Four (Benin, Burkina Faso, Chad, Mali)
CAGR	Compound Annual Growth Rate
CAP	Common Agricultural Policy
CE	Conformité Européenne
CET	Common External Tariff
COMCEC	Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation
COPAG	Coopérative Agricole (Morocco)
CR	Coverage Ratio (NTMs)
CU	Customs Union
EAC	East African Community
ECO	Economic Cooperation Organization
ECOWAS	Economic Community of West African States
EEC	European Economic Community
EFTA	European Free Trade Association
EIF	Enhanced Integrated Framework (Gambia)
EMENA	Eastern Europe, Middle East, North Africa
EU	European Union
EU-28	European Union with its 28 members
FAO	Food and Agriculture Organization
FAPDA	Food and Agriculture Policy Decision Analysis
FR	Frequency Ratio (NTMs)
FTA	Free Trade Area
GATT	General Agreement on Tariffs and Trade
GCCI	Gambia Chamber of Commerce and Industry
GDP	Gross Domestic Product
GIEPA	Gambia Investment and Export Promotion Agency
GMP	Green Morocco Plan
GNAIP	Gambia National Agricultural Investment Program
GSP	Generalized System of Preferences
GSTP	Global System of Trade Preferences
HDI	Human Development Index
HS	Harmonized Commodity Description and Coding System
ICPCEM	Islamic Countries Products Common Exchange Market
ITC	International Trade Center
ITC Macmap	International Trade Center Market Access Map
LDC	Least Developed Country
MED-AMIN	Mediterranean Agriculture Market Information Network
MERCOSUR	Mercado Común del Sur- Southern Common Market
MFN	Most-Favoured-Nation
MoASP	Ministry of Agriculture Strategic Plan (Gambia)
NAFTA	North American Free Trade Agreement

NAV	Non-Ad Valorem
NGO	Non-Governmental Organization
NTB	Non-Tariff Barrier
NTM	Non-Tariff Measure
OECD	Organisation for Economic Co-operation and Development
OIC	Organisation of Islamic Cooperation
PAFTA	Pan-Arab Free Trade Area
PAGE	Programme for Accelerated Growth and Employment
PPP	purchasing power parity
PRETAS	Protocol on Preferential Tariff Scheme
PRSP	Poverty Reduction Strategy Paper (Gambia)
PSA	Partial Scope Agreements
PTN	Protocol on Trade Negotiations
QR	Quantitative Restrictions
RTA	Regional Trade Agreement
SCEDP	Sector Competitiveness and Export Diversification Project (Gambia)
SDG	sustainable development goal
SESRIC	Statistical, Economic and Social Research and Training Centre for Islamic Countries
SITC	Standard International Trade Classification
SME	Small and Medium-sized Enterprises
SMIIC	Standards and Metrology Institute for the Islamic Countries
SOE	State Owned Enterprises
SPA	Strategy for Poverty Alleviation (Gambia)
SPS	Sanitary and Phyto-Sanitary
TAGEM	General Directorate of the Ministry of Agriculture and Forestry
TAO	World Trade Organization Tariff Analysis Online
TBT	Technical Barriers to Trade
TFA	Agreement on Trade Facilitation
TIKA	Turkish Cooperation and Coordination Agency
TISVA	Turkey Waste Prevention Foundation
TOBB	Union of Chambers and Commodity Exchanges (Turkey)
TPS-OIC	Trade Preferential System among the Member States of the OIC
TRQ	Tariff Rate Quota
UNDP	United Nations Development Programme
UN Comtrade	The United Nations Commodity Trade Statistics Database
UNCTAD-TRAINS	United Nations Conference on Trade and Development Trade Analysis Information System
USA	United States of America
USD	United States dollar
WB	World Bank
WDI	World Development Indicators
WITS	World Integrated Trade Solution
WTO	World Trade Organization
WTO TPR	World Trade Organization Trade Policy Review
WTO RTA-IS	World Trade Organization Regional Trade Agreements Information System

Executive Summary

This report studies the potential ways and means of increasing the volumes of international trade flows in agricultural products within the OIC area, based on a review of the performance, policies and practices of the member states in this domain. The report is prepared for the 13th meeting of the Agriculture Working Group of COMCEC to complement the analytical report on agricultural trade networks within the OIC prepared for the previous meeting of the Group.

All agricultural products considered in the report fall into three groups in the broadest sense: Agri-food products, Fish products, and Agricultural raw materials. Within each of these three product groups, there exists a number of product divisions, and each division itself covers several products.

Products with largest shares within total agricultural exports/imports of a particular member country or a particular regional grouping of the members reveal useful information about comparative advantages/disadvantages of trading countries relative to destination/source countries. For this reason, a special emphasis is placed on the analysis of the patterns or flows of agricultural trade within the OIC as well as between the OIC and the rest of the world.

While this analysis provides a useful description of the *current* composition/structure of the OIC's agricultural trade, it does not necessarily offer any insights into the directions that the members' trade may take in the *future*, making it difficult to identify the product-country pairs that have the greatest potential to boost intra-OIC trade. To look beyond the current trade performance of member states and to explore areas for effective policy intervention, the report takes product divisions with low intra-OIC import coverage but high growth rates of import values as key products, and identifies main exporters and importers of these products based on an analysis of trade flows.

In discussing policy interventions and related measures, the report focuses on three sets agricultural trade policies: (i) border measures such as applied tariff rates, (ii) non-tariff measures such as sanitary requirements, export subsidies and technical barriers to trade, and (iii) bilateral and multilateral trade agreements among countries.

The study reaches the following conclusions:

- There exists considerable protection through high tariff rates within the OIC for certain critical product divisions and products such as sugars and oil seeds, and potential exporters of these products face high applied tariffs imposed by potential importers. A similar pattern is observed for a large number of products at the product level for the top export products of the OIC countries.

- Some other key product divisions such as meat are not subject to high tariff protection but still exhibit low shares of intra-regional trade within the OIC region. Thus, non-tariff measures may also be responsible for limited intra-OIC agricultural trade in certain products.

- The OIC members that are also signatories of ECOWAS or Pan-Arab Free Trade Area automatically build binding trade partnerships with each other through the regional agreements they join in, but other OIC countries have only one or two trade agreements involving another OIC country. In general, the OIC member countries have, on average, fewer trade agreements with other OIC countries than their non-OIC trade agreements.

- The results from an online survey on intra-OIC agricultural trade policies indicate that agricultural trade is seen as an important driver of overall development and food security. Three factors that are emphasized more by the survey participants as among the ones adversely affecting agricultural trade flows are (i) the very poor status of marketing knowledge and information, (ii) the very poor status of financial resources, and (iii) the very poor status of technical adaptability of producers. The standardization of the products is also seen as a problem area. Survey results also confirm Saudi Arabia's and Turkey's agricultural import and export hub roles within the OIC, respectively. These two countries are accompanied by non-OIC partners Russia, Germany and China both for the current and for the future agricultural trade relationships.

- An observation worth mentioning in the study concerns the significance of smallholder farming practices across the OIC. The scale problem in agriculture prevents large segments of the rural population from reaping the benefits of productivity advantages associated with larger production scales, including international competitiveness in many OIC countries. Access to credit and information is particularly challenging for smallholders. Cost disadvantages, barriers against modernization, and other supply chain issues act as significant barriers to access to global markets (particularly to global markets for products in the higher end of value chains).

- Another result that emerged out of the field visits completed in three case study countries (the Gambia, Morocco and Turkey) is that there is a common understanding among stakeholders from different member countries to the effect that cooperation and coordination among OIC member countries in the area of agricultural trade would be mutually (even multilaterally) beneficial.

- The review and analysis also indicate that many OIC countries have problems concerning data availability and data reliability in the realm of agricultural trade flows and agricultural trade policy measures (including both the tariff rates and the NTMs). More specifically, commonly referenced international databases that collect and publish statistics on tariff rates and NTMs at product division and product levels do not cover the statistics of most recent years for many OIC countries.

Building on these results, the following policy recommendations are formulated to help promote intra-OIC agricultural trade in the near future.

- The main policy recommendation that would promote intra-OIC trade in agricultural products is the establishment of Free Trade Areas first at the three regional groups level and then for the entire OIC. As explained in detail in Chapter 5, multiple membership to different regional trade agreements result in crisscrossing, creating the "spaghetti bowl" phenomenon signaled by Bhagwati (1995). This has the effect of creating discriminating high tariffs applied by OIC member countries to others which are excluded from the existing regional trade agreements with non-OIC countries. One should keep in mind that Article XXIV of GATT opens the way to FTAs or customs unions, at the condition of non-discrimination and in line with the GATT utmost aim of liberalizing trade at global scale. A closer look on the existing agreements and their exceptions / exclusions / sensitivities shows that they are far from achieving that aim and should not be a barrier to new, larger integration efforts which will require in any case the approval of the related WTO committees (UNCTAD 2016). It should be noted that difficulties associated with the rules of origin could be overcome by the four basic principles of the WTO's

Rules of Origin Agreement, i.e. non-discrimination, predictability, transparency and neutrality (Medalla and Lazaro, 2006).

- Reductions in tariffs applied to fellow member states in key product divisions and products as identified in this report would be the most effective policy action to promote intra-OIC agricultural trade since tariff protection in these products seem to be acting as significant barriers against trade.

- A large fraction of exporter-importer pairs matched as potential partners for mutually beneficial trade through the analysis in this report does not have trade agreements with each other as yet. There is therefore significant room for improvement in trade performance of, and associated benefits for, member countries through bilateral agreements to be signed to cover the products identified in the analysis.

- Some agri-food products that are not subject to high tariff protection turned out to hold a promise for increased trade within the OIC area due, probably, to the existence of non-tariff barriers such as health and other standards. This implies that the OIC countries should prioritize non-tariff measures related to standardization and certification issues. An important area for policy intervention within this context is the creation of common standards for Halal certification across the OIC. It is recommended that the work that has completed under the SMIIC on Halal certification should be extended with a richer understanding that aim at developing a unique OIC-wide Halal certificate that functions as the European Economic Area's CE marking.

- Since the OIC countries have comparatively large numbers of existing bilateral and multilateral trade agreements with non-OIC countries, the scope for trade policy harmonization within the OIC is quite limited. Still, there are potential gains from acceleration of the implementation of the Trade Preferential System among the OIC Member States (TPS-OIC). A customs union among the OIC countries that currently have no external commitments to be violated would be the logical next step after the full implementation of the TPS-OIC in the future.

- One important barrier before further increases in intra-OIC agricultural trade is the degree of similarity between the geography, climate conditions and factor endowments of the OIC countries. This implies that they face competition from each other in certain agricultural products and in certain markets around the globe. For this reason, the OIC countries should design and implement policies that aim product diversification, trademarking, marketing strategies and advertising campaigns wherever possible.

- Incentivizing commercial cooperation and foreign direct investment in agriculture within the OIC should be defended as a potentially important policy action by the member countries. Since the OIC member countries generally differ in relative abundance of land and natural resources and of financial funds and credit, businesses should be encouraged to buy unused land to initiate agricultural production and exports in fellow OIC countries.

- Non-commercial cooperation is another policy area where the OIC member countries share technical expertise, skills, and capacity building regarding safety standards with each other. More specifically, particular attention should be paid to policies, programs

and projects that would support the effective sharing of best-practice cases in agriculture and agricultural trade.

- New projects should be designed and conducted (i) to thoroughly identify the data availability and reliability problems in agricultural trade policy measures all across the OIC and (ii) to develop institutional reform agendas that would help the OIC member countries alleviate the existing capability problems in the near future. A more specific policy action may be establishing a new division on agricultural trade policy measures within SESRIC and benefiting from this organ's established capacities in data collecting and dissemination.

- It is also recommended that Agriculture and Trade working groups of the COMCEC should work together with an understanding that evaluates trade as a whole and treat agricultural trade as a subset of overall trade. One research question that should be targeted with this broad view is concerned with the tariff equivalents of NTMs. A well-structured project should aim at calculating these tariff equivalents for a sufficiently large set of products and countries. The methodologies explained and exemplified in WTO's (2012) *A Practical Guide to Trade Policy Analysis* may be used to structure such a research project. Another way to go forward is to develop and analyze general equilibrium models of trade policies and trade integration both within the OIC and between the OIC and non-OIC countries.

Introduction

International trade promotes economic growth and creates welfare gains for trading partners. Yet, many developing countries face serious difficulties that prevent them from fully reaping the benefits of international trade. Most members of the OIC are hardly exceptions: Majority of the OIC member countries fail to tap international trade's full potential, and this goes true not only for their trade with the third parties but also concerning their bilateral trade with fellow OIC members, or for the intra-OIC trade in general. Of the wide range of underlying reasons, not all are applicable to or relevant for every single member state but there certainly are similarities and patterns.

Scattered across a vast area spanning across continents, member states of the OIC are a truly diverse group, not only in terms of land mass and population size, but also in terms of the level of economic development and the composition of exports/imports. While it is generally true that the OIC members are trading increasingly more with the rest of the world and among themselves, growth rates and composition of trade vary widely across members. Many OIC members rely heavily on oil and other natural resources or primary agricultural products as their major source of export revenues, while others depend largely on imports of these products. There is a large variation among members even when one considers trade in agricultural production alone. Some members are net exporters of a few or wide variety of products, whereas others are significant net importers of many agricultural products, and may even be facing serious food security issues.

To help the OIC member states formulate effective measures and policies so as to make greater use of their potential as trading partners in global and OIC markets for agricultural products, diverse needs and priorities of three existing regional groups should be examined. The groups are therefore studied based on the similarities of the metrics measuring their potential and performance in international agricultural trade, and other relevant characteristics, and studying the (common) strengths and weaknesses of each group, together with the emerging trends in the world markets.

As also stated in COMCEC Trade Outlook 2017, policy coherence is critically important indeed in order for individual members to better integrate into global markets efficiently and to overcome the challenges they face in overcoming their product dependency, high trade costs, and securing the supply of affordable food for consumers and quality raw materials for producers. This general imperative also applies to policies and measures that would help promote intra-OIC trade in agricultural products. Sound agricultural trade policies to be designed and implemented with these goals in mind require a review of the existing state of policies so as to identify and remove any inefficiencies and weaknesses.

The OIC has 57 member states located in different parts of the world. The levels of economic and agricultural development vary substantially across members. 36 of the OIC members have high agricultural potential in terms of at least one of the main factors affecting agricultural production. Within this group, 25 countries from different climatic regions rank among the top 20 producers of major agricultural products worldwide. The production and trade potentials of these countries are in sharp contrast with those of the 21 least-developed members, located mostly in Sub-Saharan Africa, whose agricultural production capacity can hardly meet their growing demand for food. This latter group rely heavily on agricultural imports, particularly food products, and face serious food security issues.

The regional groups of the OIC differ in the number of member countries included in the group, the average and total level of population of the group, and the overall level of economic and agricultural development. This implies that comparing the economic and agricultural performance of the groups is a difficult task. However, the uneven distribution of agricultural trade capacities, performance and potential of different groups within the OIC can still be simply documented by looking, for example, at their shares in total OIC agricultural trade: As of 2016, the Asian Group had the highest share (66.9%) in total OIC exports of agricultural products; followed by the Arab and the African Groups with shares at 21.8% and 11.3%, respectively. In terms of agricultural products imports, the Arab Group accounted for 52% of the OIC's total in the same year, and was followed by Asian and African groups' shares of 40% and 8%, respectively. The African Group countries whose trade networks include many third party partners have the lowest intra-OIC trade share in its agri-food products exports, 7.4% while the Arab Group and Asian Group countries have an intra OIC trade share of 45.7% and 11%, respectively.

The dual challenges of reliance on trade for both agricultural development and securing food supply to feed the urban populations in OIC member countries make international trade a strategic area of public policy. Yet, in line with the diverse structures of the OIC economies, governments employ a wide spectrum of tools in the pursuit of an equally wide ranging set of trade policies, depending upon the role of international trade in their economy-wide and agricultural policy objectives.

Trade policy measures are broadly composed of (i) border measures (mainly the tariff rates), (ii) non-tariff measures, and (iii) trade agreements between two or more countries. Tariffs are simply taxes exercised on imported products. A tariff can either be levied as an ad valorem tax in percentage terms or be levied as a specific absolute value per imported unit. There exists a diverse set of qualifications that characterize tariffs. Most-Favored Nation tariff rates are the ones promised to be applied to the other members of the WTO under the condition that the exporting partner does not have a preferential trade agreement with the imposing country. Bound tariffs are the highest levels of MFN tariffs determined during the trade negotiations between trade partners. Applied tariffs exercised by the customs administrations of the imposing country are usually lower than the bound rates committed. The Non-Tariff Measures include a large and diverse set of regulations, arrangements, taxes and standardization schemes that are applied to the exported and imported products in a country. Sanitary requirements, export subsidies, technical barriers to trade, anti-dumping measures, and rules of origin are among the most commonly exercised NTMs. Trade agreements are negotiated and signed bilaterally and multilaterally and covers certain predetermined sets of tariff preferences and NTMs. Regional trade agreements are reciprocal, but preferential trade agreements are the ones where a country unilaterally agrees to follow the existing preferential system of a partner country or a groups of partners. Free trade agreements are signed bilaterally and, most commonly, multilaterally to establish a free trade area, which, by definition, is characterized by zero tariffs among the partner countries.

The purpose of this report is to review the current performance and agricultural trade policies of different groups of the OIC countries so as to study the interaction between policies and performance. Any regularities and patterns emerging from such a study will facilitate the identification of right measures needed to create an environment enabling the member states to reach larger volumes of global and intra-OIC trade in a wider range of agricultural products by taking better advantage of their comparative advantages, and improving their competitiveness.

The report is prepared for the 13th meeting of the Agriculture Working Group of COMCEC as a complementary to the analytical report on agricultural trade networks prepared for the previous meeting of the Group. These two reports differ substantially but are highly complementary to each other. The previous report mainly focuses on the identification of existing trade networks in agricultural products by building upon detailed trade flow data and using the tools of network analysis; it has only a peripheral interest in the stance of agricultural trade policies in the OIC member countries. The present report, however, focuses on agricultural trade policies covering tariff measures, NTMs and trade agreements and studies agricultural trade flows in detail to identify top product divisions and top products since these are to guide the analysis of agricultural trade policy measures in the OIC. Most importantly, this report differs crucially from the previous report on agricultural trade networks since it identifies product divisions and products and explicit exporter-importer country matches that carry the greatest potential to promote intra-OIC agricultural trade.

The review and analysis presented in this report also include the results originating from an online survey that has targeted the stakeholders in the OIC countries who work at trade and agriculture ministries, other relevant government units, academia, private sector, and NGOs. While the total number of participants and the number of different countries these participants represent remain lower than initially expected, the survey results are still informative especially with regards to (i) the main challenges faced in agricultural trade, (ii) the roles of SOEs, cooperatives, and marketing boards, and (ii) existing and expected agricultural trade networks of the OIC member countries.

To complement (i) the analysis that identifies the potential product divisions/products and matched country pairs and (ii) the survey results, six country cases were selected for further study to put forwards similar characteristics of agricultural trade policies pursued by different members: Three representative countries are chosen to exemplify policies in different country groups within the OIC (the Gambia from the African group, Morocco from the Arab group, and Turkey from the Asian group). These three countries have been visited and key informants in each of these countries have been interviewed in order to obtain critical information regarding the conduct of agricultural trade policies, reforms and policy actions that affect production and the supply chains, and the prospects for increasing volumes of intra-OIC trade in agricultural products. For comparison and benchmarking purposes with regard to being an African member country that has food security problems, Chad has been selected as the other OIC member country to be studied via a desk study. Finally, two non-OIC countries (Brazil and Thailand) that stand out as two best practice countries in the context of agricultural trade.

The remainder of this report is organized as follows: In Chapter 1, the conceptual framework, agricultural trade policy terminologies, data sources and limitations, and the utilized methodologies are introduced. This is a foundational chapter in which the roadmap for the following review and analysis in Chapters 2, 3 and 4 is framed. In Chapter 2, the attention is focused on the main patterns of global agricultural trade flows and policies. In this chapter, agricultural trade flows and policies in several economic and cooperation unions across the world are taken into consideration vis-a-vis the main patterns observed in the OIC. The review and analysis presented in Chapter 3 are focused on 57 member countries of the OIC. The analysis is pursed at the product division level in this chapter; first summarized is the main patterns of agricultural trade flows, followed by the analysis of agricultural trade policy with a particular focus on potential country-product group matches that would contribute to higher volumes of intra-OIC agricultural trade. Chapter 4 is then devoted to the review and analysis of agricultural trade policies for selected case study countries. The review and analysis are based partially on the field visits to three OIC countries, i.e., Gambia, Morocco and Turkey, and partially on

specialized desk studies for Chad, Brazil and Thailand. Finally, the policy recommendations originating out of the review and analysis in the preceding chapters are collected and discussed in Chapter 5, followed by the concluding remarks. Country groupings, product classifications, the lists of interviewed informants, and supplementary tables and figures are located in the annexes.

Chapter 1: Conceptual Framework and Methodology

This chapter is devoted to presenting the conceptual framework and methodology employed in this study, introducing the conceptual framework and methodology under three subsections: (i) data sources and terminology, (ii) methodology, and (iii) case studies.

In the first subsection, comparative analysis has been undertaken to evaluate the scope, drawbacks, and limitations of different data sources in line with research questions. Moreover, data cleaning process is described. In the second subsection, methodologies employed during descriptive studies are presented while focusing on the basic categorization of the data. Third and the last subsection focuses on the quantitative and qualitative approach employed during case studies in the context of the study.

1.1. Data Sources and Terminology

To review agricultural trade policies that directly or indirectly affect agricultural trade networks (agricultural bilateral trade flows) among OIC member countries, data on (i) trade flows, (ii) regional trade agreements, (iii) applied tariff rates, and (iv) non-tariff measures are scrutinized as the major source of information. Additionally, literature review, global and local socio-economic indicators are utilized as complementarity sources. Hereinafter, following sections separately lay out the advantages and limitations of different data sources employed through the study considering the required time for analysis, time span and country coverage, and consistency.

1.1.1. Trade Flows

The United Nations Commodity Trade Statistics Database (UN Comtrade) covers international imports and exports statistics reported by statistical authorities of many countries. On the one hand, UN Comtrade is considered as the most comprehensive trade database since it covers standardized statements of national authorities and it has been continuously updated with the new flow of information. On the other hand, UN Comtrade has some data limitations. Several limitations are listed below:

- Countries do not necessarily report their trade statistics for each and every year.
- UN Comtrade does not apply any estimation method for missing information.
- Due to confidentiality, some countries may not report some of its detailed trade flows.

Imports reported by one country may not coincide with exports reported by the corresponding partner. Inconsistencies can be due to various factors including the difference in accounting and valuation principles for export and import flows (imports CIF, exports FOB), and inclusions/ exclusions of particular products etc.

In addition, most of the known third party data sources such as ITC's Trade Map and UNCTAD and World Bank's World Integrated Trade Solution (WITS) are reporting UN Comtrade statistics with their analyses and visualization tools. While ITC's Trade Map provides a range of different visualization and analyses tools, WITS is standing out with its "bulk data download" option. However, latest trade data for many of the OIC members are not available officially through UN Comtrade or over its other extensions.

In the case of missing observations, data mirroring is another option to build data for a non-reported country based on statements of other countries. With regards, CEPII's BACI (Base pour L'Analyse du Commerce International - Database for International Trade Analyzes) is employed.

CEPII BACI database has been reconciling UN Comtrade data by mirroring figures, correcting discrepancies, and all of the OIC countries are covered as well (CEPII, 2010).

International trade statistics have been reported by countries with several product classifications. Product classification nomenclatures are defined as agreed systems for classifying goods according to defined criteria. Most common international nomenclatures are listed as "Harmonized Commodity Description and Coding System (HS)" and "Standard International Trade Classification (SITC)". While HS classification is originally developed by the World Customs Organization for organizing customs duties and RTA conditions among countries, SITC is developed by the United Nations for statistical analysis of trade data with easier classifications for sectors. In this study, SITC Rev. 4 classification system has been employed as the main unit of analyses on product classification.

There are two restrictive consequences of using the CEPII BACI database: (i) lagging behind time and (ii) having HS as the only available classification. CEPII BACI database is based on an analytical process and it takes nearly one calendar year to be announced. For instance, currently, 2016 data is available as the last available year in the CEPII BACI database. Nonetheless, considering that there are many OIC member countries that have not yet disclosed the data for 2016 through UN Comtrade, this disadvantage of the CEPII BACI database is not considered to be "too restrictive" for the envisaged study. In the case of product classification system, concordance from HS 2007 version to SITC Rev. 4 is carried out through the concordance table shared by UN Statistics Division (2008). While concordance is carried out from relation 6 digits HS classification to 4 and 5 digit SITC Rev. 4 classification, agricultural products are aggregated into product groups shared in Annex B.

To sum up, reconciled UN Comtrade data obtained from CEPII BACI database is used as the primary data source for trade flows analyses in this study. Agricultural products are converted from HS 2007 version to SITC Rev. 4 covering the period from 2008 and to 2016. Products are aggregated in line with product list shared in Annex B. Considering all product, country, and year pairs, the database covers 9 years, 240 countries, 20 product groups and more than 1 million observations.

1.1.2. Regional Trade Agreements

Within World Trade Organization (WTO) system, if a WTO member grants a certain country a special favor, such as a lowering tariff rate (custom duty) for one of its products, the same country has to do follow it for all other WTO partners, as well. As this principle is known as Most-Favoured-Nation (MFN) treatment, bilateral and plurilateral trade agreements are allowed exceptions in which countries may provide lower tariff rates than their MFN rates to their trading partners. In particular, reciprocal preferential trade agreements (such as free trade agreements and customs unions) are recognized as instruments to facilitate freer trade flow among its signatories by the WTO. Accordingly, trade agreements are the exceptions of equal treatment, and prominent tools of trade policies implemented by countries. Currently, the number of regional trade agreements (RTAs) in force is 463 as of October 26, 2018 (WTO, RTA-IS).

From a time-series perspective, NSF-Kellogg Institute Database on Economic Integration Agreements and Mario Larch's Regional Trade Agreements Database provide a wide range of time span covering agreements notified to the WTO, but both of these databases are out of date while the first one ends in 2012 and the latter one ends in 2015. ITC's Market Access Map (Macmap) also covers RTA's in force, but it is not designed for bulk downloads and has some

missing information. The WTO's Regional Trade Agreements Information System (RTA-IS) has been employed in this study as the major reference point for trade agreements while it covers all RTA's which are notified to WTO and in force. The list of agreements has 49,392 pairs of country/country groups as observations.

1.1.3. Applied Tariff Rates

Within the scope of preferential trade agreements, countries may promise to provide lower tariffs than their promised Most Favoured Nation (MFN) rate. In the context of the customs union and the free trade area, the preferential tariff rate is set to zero for all products. Yet, some preferential agreements may specify that signatories will receive a percentage reduction from the MFN tariff, but not necessarily zero tariffs. Hence, tariff rates become differentiating tools of countries' trade policies, which may differ across partners for the same products. In order to track the agricultural trade policies, "tariff rate implemented by importer" is utilized as one of the main indicators.

Depending on importing country's tariff schedules, customs duties may be based on specific quantity limits, ad valorem rates or the combination of the two. An "ad valorem duty" is based on the value of the product and expressed in percentage terms. An "ad valorem equivalent (AVE)" is the equivalent percentage of a specific duty when tariff schedule is not originally defined with percentage terms on its value. For instance, customs duty may be set considering the quantity of the product rather than its trading value. In this regard, in order to compare the agricultural trade policies across countries and product groups, AVE tariff rate has been employed in this study.

The tariff schedule of a country contains a list of all products which can be imported. In line with HS classification, tariff schedules are reported in national tariff lines. Most detailed universal level of product classification is at 6 digits in HS classification, and tariff information for a given country can be shared at sub level of these 6 digits in line with national tariff lines which differ from one country to another.

Below, advantages, disadvantages, and limitations for each data source commonly used in the literature are listed.

- World Trade Organization (WTO)'s Tariff Download Facility and Tariff Analysis Online (TAO): There are missing OIC countries (i.e. Azerbaijan, Comoros, Iran, Iraq, Lebanon, Libya, Palestine, Somalia, Sudan, Syria, Turkmenistan, Uzbekistan). Trade agreements and their follow-up tariff rates are not up to date in some cases. It has just covered HS classification rather than SITC Rev. 4. It has a user-friendly interface for downloading and aggregating data.
- World Integrated Trade Solution (WITS): It has embedded conversions for different product classifications and also covers SITC Rev. 4. Moreover, it offers consistent classification over years even though countries use different classification as they report their tariff schedules across the years. There exist inconsistencies considering data from the WTO.
- UNCTAD-TRAINS (United Nations Conference on Trade and Development - Trade Analysis Information System): It is not up-to-date; it ends in 2014. The lack of current data is the main reason not to be referred further.
- CEPII – MAcMAP HS6: It is not up-to-date; it ends in 2007. The lack of current data is the main reason not to be referred further.

- International Trade Center (ITC) – Market Access Map (Macmap): It contains applied tariffs collected from national institutions. It covers 54 of 57 OIC countries (data for Iraq, Somalia, and Turkmenistan is missing). This dataset includes AVEs calculated according to WTO methodology for all non-ad valorem (NAV) tariffs. It has just HS classification rather than SITC Rev.4. It is not designed for bulk download while it limits the size of the queries. Nonetheless, it is consistent with WTO data and its coverage is larger than WTO's public database.

Hence, ITC Macmap database is chosen as the main source of "tariff data implemented by the importer". Tariff rates are taken into consideration with AVE tariff rates based on World Tariff Profile at HS 6 digits. Aggregation from national tariff line to HS 6 digits is completed by simple average method because of lack of standardized trade flow data on national tariff lines. Since most of the HS 6 codes covers just one national tariff line, simple mean is not be a hindrance for the success of the further analyses. However, aggregation from HS 6 digits to the product list shared in Annex B is done with weighted average method since there are multiple HS 6 products under one product listed in Annex B and the simple average may distort the further results and findings.

Up to date tariff schedules for 54 OIC members, 28 EU (European Union) members, 3 NAFTA (North American Free Trade Agreement) countries, 5 MERCOSUR (Mercado Común del Sur-Southern Common Market) countries, 10 ASEAN (Association of Southeast Asian Nations) countries are gathered from Macmap.

Countries base their tariff schedules on the HS nomenclature but they may use a different version of HS classification across years. For instance, for the year 2016, Turkey reports its tariff schedules with HS 2012 revision but Mozambique reports its tariff schedules with HS 2007 version. Moreover, for some countries, up to date tariff schedules is dated to older years like 2015 or 2014. For 5 countries (Sierra Leone (2006), Libya (2006), Philippines (2007), Suriname (2007), Maldives (2009)), up to date data belongs to pre 2010 period. While measuring weighted means, tariff schedules are combined with related trade flow data from UN Comtrade and CEPII BACI in line with their HS versions. Following, each HS version is related to SITC Rev. 4 with the related concordance tables. Concordance tables from HS2017, HS2012, HS2007, HS2002, HS1996 and HS1992 to SITC Rev. 4 are collected from UN Stats and EU RAMON.[1]

1.1.4. Non-Tariff Measures

Non-tariff measures (NTMs) are trade policy measures other than ordinary tariff rate arrangements which are expected to met in international trade (UNCTAD, 2012).

Different set of data sources for NTMs are listed with their advantages, and drawbacks below.

- International Trade Center (ITC) – Market Access Map (Macmap): This data has been collected from national offices by ITC from 2008 onward. It covers up to date information. However, it is not designed for bulk downloads with limiting queries.
- CEPII NTM-MAP: It is not up to date, ending in 2015.
- UNCTAD NTM Hub: It does not have a user-friendly interface to download NTMs by product and partner groups simultaneously. Moreover, it is not designed for bulk downloads or querying data.

[1] There are no direct concordance tables from HS 92 to SITC Rev. 4 and from HS 96 to SITC Rev.4. Hence, these products are related to HS 07 and then from HS 07 to SITC Rev.4. See Annex B for more information on product classification and data sources.

- European Commission Market Access Database Trade Barrier: It is not developed for downloading data.
- WTO I-TIP: It has missing OIC countries (i.e. Azerbaijan, Comoros, Iran, Iraq, Lebanon, Libya, Palestine, Somalia, Sudan, Syria, Turkmenistan, Uzbekistan). It takes time to download and aggregate the data. Crossed queries for specific product, country, and non-tariff measures are possible.

WTO I-TIP database is employed as a source of NTMs. Even though there are some drawbacks, it allows the aggregation process.

1.2. Methodology

In this study, most of the quantitative analyses are based on descriptive statistics with a benchmarking approach. In brief, there are complementary approaches employed in (i) analysis of agricultural trade flows and (ii) review of agricultural trade policies. Below, approaches and methodologies employed in respective analyses are explained.

1.2.1. Analysis of Agricultural Trade Flows

In the case of descriptive studies, major trade blocs are used as the main reference point in benchmarking. These major trade blocs are chosen as EU-28, ASEAN, NAFTA, MERCOSUR, and OIC considering the differences in their regional integration levels, their geographic positions in the world, and their shares in the total agricultural trade flows. Moreover, three subsets of OIC countries (Africa, Asia and Arab countries) are used as the reference country groups which are shared in Annex A.

In the case of products, agricultural products covering agri-food products, agricultural raw materials, and fish products as grouped in Annex B is employed as the unit of analyses. Taking into consideration the country and product groups, top to down approach is employed as each chapter firstly focuses on general trends, and continues with detailed analyses. As trend analyses are conducted for the time period from 2008 to 2016, standing out products and countries are identified considering the last 3 years (2014-2015-2016) average. Moreover, in order to identify standing out countries and products, top 5 products/countries are shortlisted considering their share from the respective total for the disaggregated level of analyses. In order to understand the overall trends, both export and import trends are evaluated.

In order to identify unexploited potentials trade matches, a simple graphical layout (quadrant scatter graph) is implemented to highlight the key products that can be targeted in promoting intra-OIC agricultural trade. The central idea of the scatter graph layout is to identify products simultaneously through information gathered from x-axis and y-axis. In this specific layout, “percentage of coverage of the region's imports” is taken as x-axis while it provides information on the current level of intraregional trade. Secondly, “growth rate of the region’s import” is taken as y-axis while it proxies the future demand. Technically, the growth rate is measured by Compound Annual Growth Rate (CAGR) formula for the time period from 2008 to 2016. In the case of x-axis and y-axis, last 3 year averages are taken for the time period from 2014 to 2016. Moreover, the bubble sizes of each product represent the total average global trade volume between 2014 and 2016.

Through the quadrant analysis, products with low levels of regional integration and higher growth rates are highlighted in the upper left-hand side. Furthermore, considering their bubble size - volume of global demand-, top 3 products are selected. Country pairs most likely to be successful to promote intra-regional trade are identified through Sankey diagrams in which

flows represent the volume of bilateral trade between countries for these specific 3 products. Third and the last step of these analyses is reviewing the stance of agricultural trade policy among these matched countries and strategic products considering applied tariff rates and preferential trade agreements. Moreover, these analyses are conducted for four subsets of country groups (region): OIC as a whole, African OIC countries, Asian OIC countries, and Arab OIC countries.

1.2.2. Review of Agricultural Trade Policies

Throughout the analysis, different classifications of policy measures are used in reviewing agricultural trade policies. First and foremost, a distinction is made between tariffs and NTMs and is followed in all chapters of the report. Second, trade agreements are taken into consideration as an important leg of agricultural trade policy.

For tariffs, the analysis is focused exclusively on ad valorem equivalents of average applied tariffs where the averages are weighted through the relevant trade flow data. For instance, an average applied tariff for a particular product or product group imposed by a country or a country group is the weighted average that weighs the applied tariff through imposing countries, relevant products and the corresponding trade partners.

Regarding the NTMs, the preferred classification in this report is that of UNCTAD (2010) as explained, again, in WTO (2012, Ch. 2). According to this classification, NTMs are grouped under 16 headings each characterized by a letter from "A: Sanitary and Phyto-Sanitary Measures" to "P: Export-related measures." Serious data limitations exist in the case of NTMs since not all NTMs from the class "A" to the class "P" are reported in the relevant data sources for all products and for all countries. The fraction of trade and the number of products that are affected from a particular class of NTMs in particular aggregated product groups, e.g., animals, vegetables, hides and skins, wood, food products, are available from the WITS database for some of the OIC member countries.

RTA, FTA, and PTA databases are also used to collect the most recent data on trade agreements among OIC countries.

To obtain country-specific information on agricultural trade policies and related issues, a survey is prepared and conducted through an online platform. The survey includes 20 questions on

- the importance of agricultural trade on development and food security,
- the factors that limit the contribution of agricultural trade,
- the current state of factors that affect the agricultural trade flows most,
- the roles of marketing boards, state-owned enterprises, and cooperatives,
- the close trade partners in agricultural products,
- the ways by which further trade facilitation in agricultural products can be realized, and
- the networks of stakeholders and country partners in agricultural trade.

The main results from this survey are summarized, and the importance of these results is discussed in Chapter 3. The survey has received a total of 61 responses from 21 OIC countries (3 from the African, 10 from the Arab, and 8 from the Asian groups). However, around one-fourth of these responses have been disregarded because of incompleteness. The total number of responses taken into account in the analysis is N = 46.

One novelty of the agricultural trade policy review presented in this report originates from the following: A quadrant analysis has been implemented to determine which products and

countries might be targeted in agricultural trade policy making to promote intra-OIC agricultural trade. The policy review in all three dimensions, i.e., tariffs, NTMs, and trade agreements, has also been focused on these products and countries that would play a significant role through their agricultural trade potential. A subset of policy recommendations has been developed according to the results of this specialized review.

1.3. Case Studies

As mentioned in the Introduction, six countries are selected as case study countries. Brazil and Thailand are the selected non-OIC countries, and Turkey, Morocco, Gambia and Chad are the OIC members.

Brazil and Thailand are two non-OIC countries from two different continents, and they stand out as two of the best practice cases across the globe in the field of agricultural production and trade. Turkey is chosen as a field visit country from the Asian group of OIC mainly because she is a prominent export hub for agricultural products within the OIC (COMCEC, 2018b). Morocco, chosen as the field visit country from the Arab group, has a share of agriculture in employment that is larger than Turkey's. The field visit country from the African group, i.e. Gambia, on the other hand, is a much smaller country than Turkey and Morocco, and one rationale for choosing Gambia is this country's product dependence to "wood" and "fruits and nuts." Finally, Chad is the OIC member country chosen as the desk study case. One reason Chad stands out as a potential case study country is that there is relatively more available data for Chad as the country has been reviewed by the WTO secretariat in 2007 and 2013.

For these six countries, agricultural trade flows and agricultural trade policies have been analyzed and reviewed in greater detail. Their close trade partners in agricultural products, both their top export destinations and their top import origins within the OIC, have been identified. Then, their top export products/product groups and top import products/product groups have been determined as well.

The analysis of trade flow data is followed by the detailed analysis of agricultural trade policy measures. The trade-weighted average applied tariffs have been computed for the top products/product groups and top trade partners. NTMs have been analyzed by using the NTM coverage ratio, NTM frequency ratio, and NTM affected product count in each country and for each sector. Finally, the trade agreements in force have been documented, and the OIC members that export to the case study country under preferential tariffs have been determined.

Three of the case study countries, i.e., Gambia, Morocco and Turkey, are the field visit countries as well. These countries have been visited to conduct face-to-face interviews with different stakeholders in agricultural trade and agricultural trade policy making. The main purpose of these field visits has been to collect information that cannot be obtained through the analysis and review of published statistics. For this purpose, a key informant interview in semi-structured form has been designed. The interview has been conducted in all three countries in several meetings with a number of key informants. The list of key informants includes, in each country, the directors and experts from the ministries and government offices specializing in agriculture and on trade. The list also includes private sector representatives, specialists or managers working in the field of agricultural credits, and academics whose research focuses on agriculture and agricultural trade.

The information collected through the face-to-face interviews in Gambia, Morocco, and Turkey has been summarized under three subsections for each of these countries. The first of these subsections is on agricultural trade policies, summarizing relevant institutions and policy

objectives in agricultural trade. The second subsection is on issues such as food security, supply chains, and smallholder farmers. Policy reforms and relevant constraints have been discussed under this heading. Finally, the third subsection is on the agricultural trade relationships between the OIC and the case study country and focuses more generally on promoting intra-OIC agricultural trade.

Chapter 2: Overview and Analysis of Global Agricultural Trade Policy

The rapid change occurring in the structure of output during the 20th century has been decisive in determining the 21st century main economic actors. The share of the output created in agriculture diminished rapidly to the benefit mainly of services and industry. In 2017 low income countries were still the group realizing a quarter of their GDP (26%) in agriculture (down by 2 percentage points since 2010). During the same period, the lower middle income group was down to 15% (from 17%), upper middle income group to 6% (from 7%) with the high income countries being stabilized at 1% (World Bank, 2018). However, one should keep in mind that the total output increase during this period resulted in a considerable rise in high income countries' agricultural production as well. As a result, 10% of the world population living in low income countries produce 4%, while 74% living in middle income countries produce 73% and 17% living in high income countries produce 23% of world agricultural output (World Bank, 2018). Those figures highlight the dependency of the low income countries on agriculture, while their production is almost insignificant (4%) compared to middle and high income countries and yet is still facing a severe competition in world markets. In parallel to the suggestion of the economic theory that demand for agricultural commodities is inelastic, the last two group of countries realizing the lion share of the global agricultural production, support and protect their agriculture in order to increase agricultural exports, since their comparative advantages lay in industry and service sectors. This also explains why the WTO Doha Round with a heavy agenda on agriculture could not be concluded. The biggest trade war ever taking place between USA and EU was for banana, starting in 1993 with a preferential regime introduced by EU for ACP Countries (African, Caribbean and Pacific Group of States) and discriminating against Latin American banana producers. The WTO dispute settlement concluded in 2012 confirms the importance of agriculture for those two biggest economies and for a product they do not cultivate.

The WTO Agriculture and Commodities Division together with the Institute for Training and Technical Cooperation organized a symposium on the Agriculture Policy Landscape in June 2018. The outcomes of the symposium were the need for regulated and more trade, to improve global welfare by helping the producers while addressing the challenges of sustainably providing food to the growing global population (WTO, 2018a).

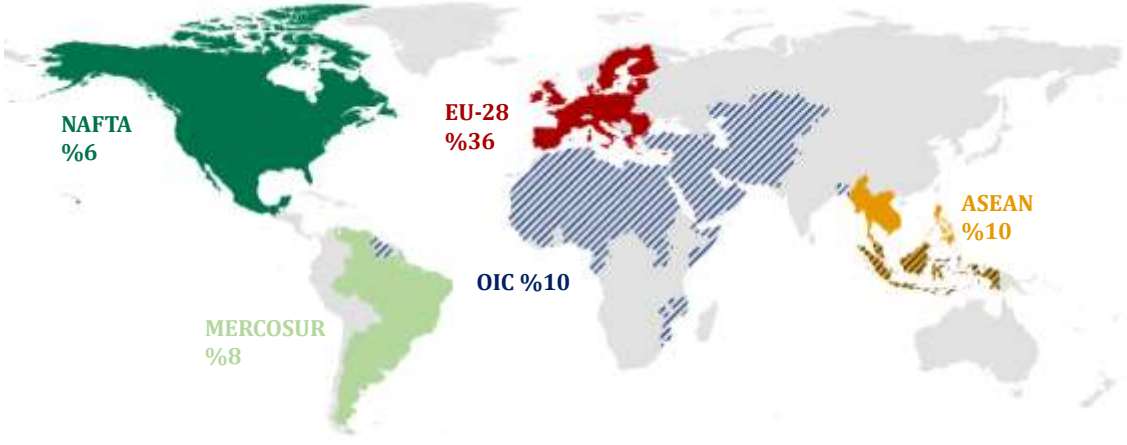
This section sets the scene for the OIC member countries resolution to design required agricultural trade policies for increasing the group's intra-trade in the sector. It examines the change in the global agricultural trade which occurred during the last decade, looking at the performance of the regional trading blocs for highly traded commodities or commodity groups.[2] Based on the introductory notes concerning the structure of output and relatively higher importance of agriculture for low income and developing countries economic growth, the section further discusses the agricultural trade policies.

[2] Agricultural trade data is given in three main groups, namely agri-food products, agricultural raw materials and fish since their production processes, trade conditions and added value differ considerably.

2.1. Overview of Global Agricultural Trade

In 2016, 70% of agricultural products' exports originated from one of the four major trading blocs, namely ASEAN, EU-28, MERCOSUR, and NAFTA. The geographic distribution of those trading blocs, together with OIC member countries is seen in Figure 2. 1. The respective shares of those four trading blocs in the world exports of agricultural products are 10%, 36%, 8% and 16%. OIC members' agricultural exports share is 10%, constituting one third of the Rest of the World. Note that three of OIC member countries, namely Brunei Darussalam, Indonesia and Malaysia are also ASEAN members and the related double counting is inevitable but of minor importance.

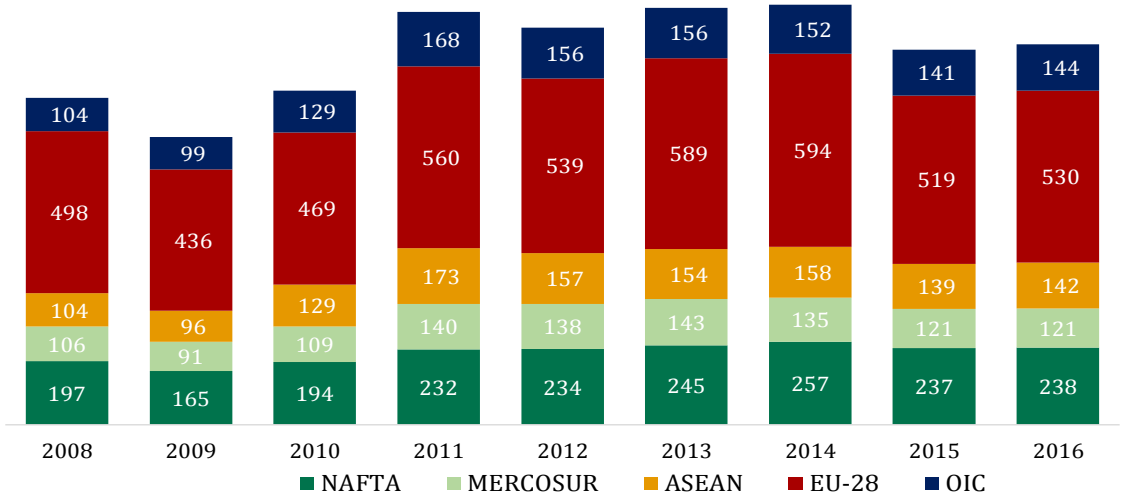
Figure 2. 1 Map of Major Trading Blocs and OIC Members



Source: Authors' own visualizations.
Note: OIC member countries are shaded with blue lines. Percentages denote the shares of the blocs in world exports of agricultural products. Three of OIC member countries, namely Brunei Darussalam, Indonesia and Malaysia are also ASEAN members and the related double counting is inevitable but of minor importance.

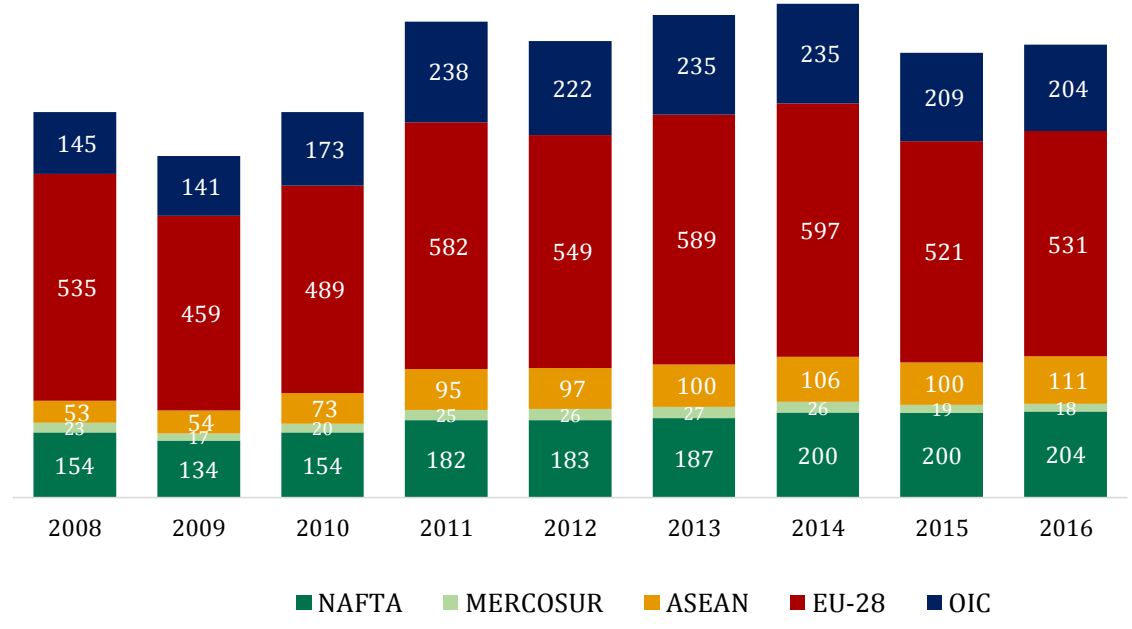
Figure 2. 2 gives an idea about the evolution of global exports by major trading blocs. In the period considered (2008-2016) while world total agricultural exports grew by 2.4% annually, the highest growth rate of 4.3% has been achieved by OIC member countries, followed closely by the ASEAN bloc with 4%. It is interesting to note that the lowest increase was realized by the EU-28. MERCOSUR followed with only 1.7%, despite all members being major agricultural producers. In the same period, NAFTA's agricultural exports grew 2.4% annually, slightly higher than the global exports. This is how the share of NAFTA (16%) in global agricultural exports did not change while the EU's share decreased from 40% in 2008 to 36% in 2016 with 530 billion USD. In 2016 NAFTA exported 238 billion USD of agricultural products. OIC's exports increased from 104 billion USD in 2008 to 144 billion USD in 2016, with its share changing from 8% to 10%. The high annual growth rate of OIC member countries agricultural exports, compared to the Rest of the World shows the group's potential in world agricultural trade.

Figure 2. 2 Agricultural Exports by Major Trading Blocs, Billion USD, 2008-2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.
Note: Three of OIC member countries, namely Brunei Darussalam, Indonesia and Malaysia are also ASEAN members and the related double counting is inevitable but of minor importance.

Figure 2. 3 Agricultural Imports by Major Trading Blocs, Billion USD, 2008-2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.
Note: Three of OIC member countries, namely Brunei Darussalam, Indonesia and Malaysia are also ASEAN members and the related double counting is inevitable but of minor importance.

Looking at the global distribution of agricultural import shares, EU-28 is the leading bloc despite a considerable drop of its import share from 44% in 2008 to 36% in 2016. The change during the period has been significant also for ASEAN's; its share doubling and reaching 8% in 2016 while the OIC's share increased only by 2 percentage points and reached 14% with NAFTA's share remaining almost constant (13% and 14% respectively). The Rest of the World's share changed from 38% to 41% in the same period. In terms of the annual average growth rate of the imports, ASEAN led with 9.8%, followed by OIC with 4.3% and NAFTA with 3.6%, slightly higher than the Rest of the World's average annual agricultural import increase of 3.6% in the period considered. MERCOSUR member countries realized an average annual decrease of 2.7% during this period, having reduced apparently the agricultural import need of the bloc. The EU-28 imports can be considered to be stabilized as the annual change has been of only -0.1%.

The analysis should also include the agricultural trade balance of the trading blocs. Two groups clearly come out: NAFTA, MERCOSUR and ASEAN form the group with an agricultural trade surplus while EU-28, OIC and the Rest of the World the group with a trade deficit. NAFTA's surplus fluctuated within a band of 30 to 60 billion USD, together with the ASEAN's surplus in a band of 30 to 80 billion USD. MERCOSUR is the only trading bloc which agricultural trade surplus indicated a clear increasing trend, from 83 in 2008 to 102 billion USD in 2016, with some higher surplus years in between. Despite being among those with an agricultural trade deficit, EU-28 managed to reduce clearly its deficit and reached almost balanced agricultural trade in 2016. In the period considered, the only group whose agricultural trade deficit continued to increase is the Rest of the World including OIC, for which the trade deficit in the agriculture, increased from 41 billion USD in 2008 to 83 in 2014, to finally reducing to 60 billion USD in 2016.

Table 2. 1 Average Annual Growth Rate of Agricultural Exports, 2008-2016

	NAFTA	MERCOSUR	ASEAN	EU-28	Others	OIC	World
Agri-food Products	2.39%	1.80%	5.63%	0.81%	4.57%	5.31%	2.46%
Agr. Raw Materials	1.91%	-0.76%	-0.10%	-1.02%	15.04%	-2.22%	3.66%
Fish Products	3.05%	1.42%	1.26%	2.34%	-1.31%	3.95%	0.24%

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

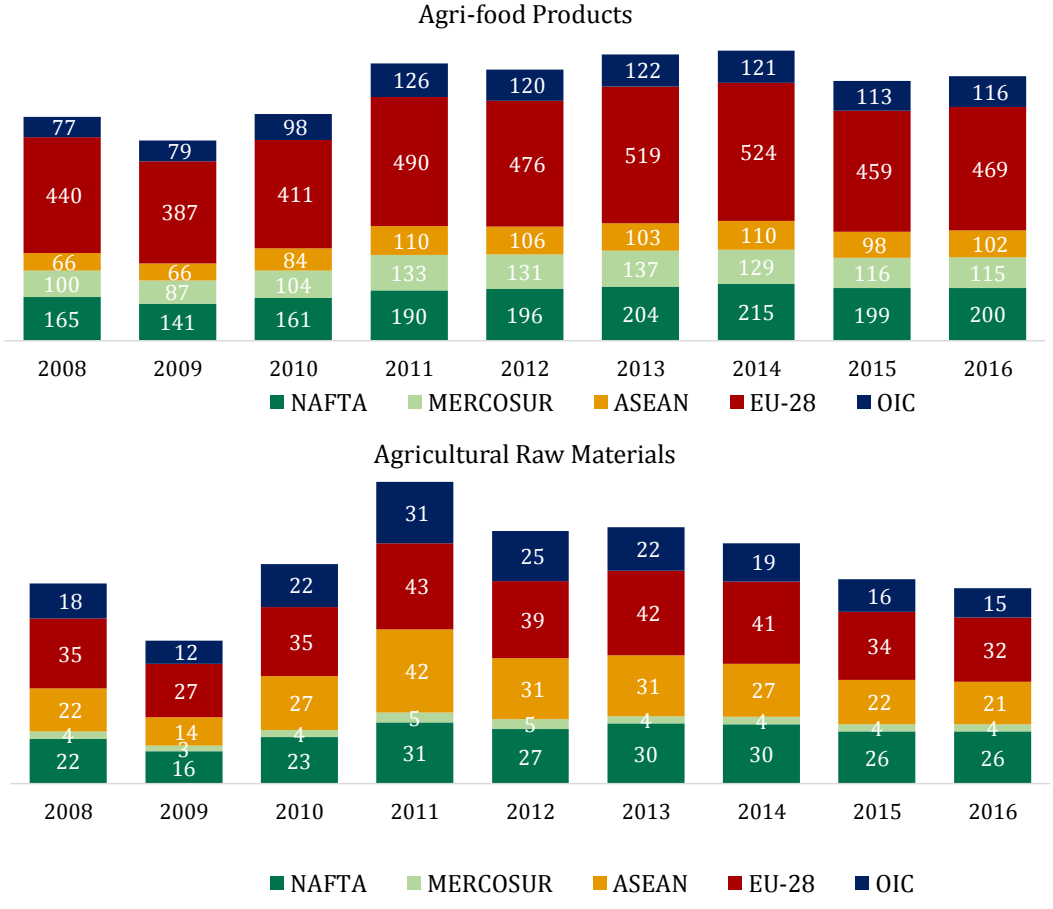
It should be added that the period comprised the biggest global economic crisis ever. The fluctuations clearly seen in global agricultural trade is the impact of the crisis on the sector. Another decreasing trend is noticeable starting from 2015.

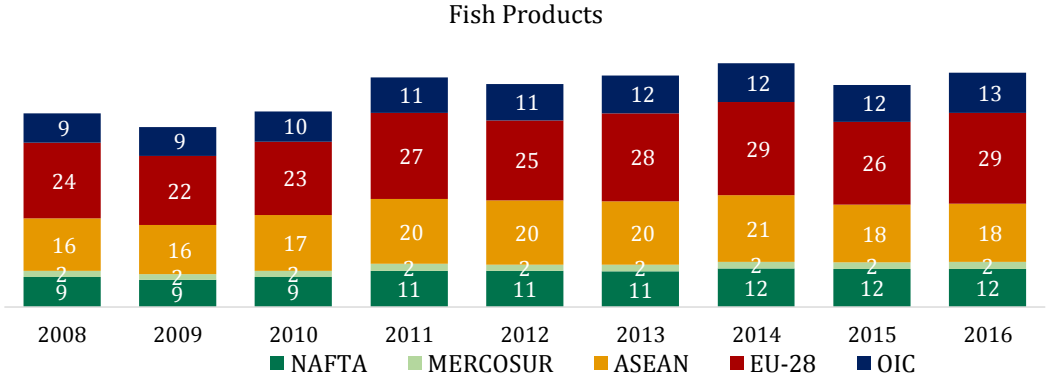
The overview of the global agricultural trade requires a further look at the product category level, the categories being agricultural food, fish and agricultural raw materials. Figure 2. 4 shows the change in the global agricultural exports, by major trading blocs and by category and for the period 2008-2016. In the agricultural food products exports, EU-28 is leading followed by NAFTA, OIC and MERCOSUR and finally by ASEAN in 2016. It should be noted that the highest average annual growth rate of agricultural food products exports has been achieved by ASEAN (5.6%) followed by the OIC (5.3%) and the Rest of the World (4.6%), the three rates being much higher than the global growth of 2.5% during the period. This is due to the low growth of the largest exporter EU-28 (0.8%), followed by MERCOSUR (1.8%) and NAFTA (2.4%) in increasing order and all three lower than the world average.

Since agricultural food products are more value-added than the agricultural raw materials, all agricultural countries aim to increase their exports of the former category while decreasing the latter. This trend can be observed on the agricultural raw materials exports for all the compared groups except NAFTA and the Rest of the World (second graph of Figure 2. 4). However, for this last group of countries there is a very rapid decrease since 2011, showing a clear decisiveness of policy change in those countries towards more value-added agricultural exports. The group whose reduction has been the most rapid in this category is OIC with 2.2% annual decrease in the exports of the agricultural raw materials during the period. However, the highest export volume of agricultural raw material was still realized by the Rest of the World in 2016, despite the negative trend mentioned above.

Trading blocs have a tendency to leave the raw material exports to the Rest of the World while continuing increasingly to export processed and higher value added agricultural food products. A similar tendency is visible for Fish products. The leading group is the Rest of the World and has increased its exports to reach 118 billion USD in 2011, while the latest figure available in 2016 is almost halved, down to 63 billion USD compared to a steady increase by the EU-28. Table 2.1 shows that average annual growth rate of exports from the Rest of the World in low value-added agricultural raw materials has been 15.04%, while it diminished for the rest of the trading blocs other than NAFTA.

Figure 2. 4 Agricultural Exports by Major Trading Blocs, Billion USD, 2008-2016





Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

2.1.1. Sectoral breakdown of major trading blocs' exports and imports

At this stage, a closer look at division level will help better understand the evolution of the global agricultural trade. Here again the analysis will be based on the major trading blocs and the change in the share of their top 5 export and import products in total exports and imports respectively. At global level, the top three product categories in the agricultural trade are vegetables-fruit, cereals and beverages-tobacco. Fish and Meat follow closely as the fourth and fifth divisions (Figure 2. 5).

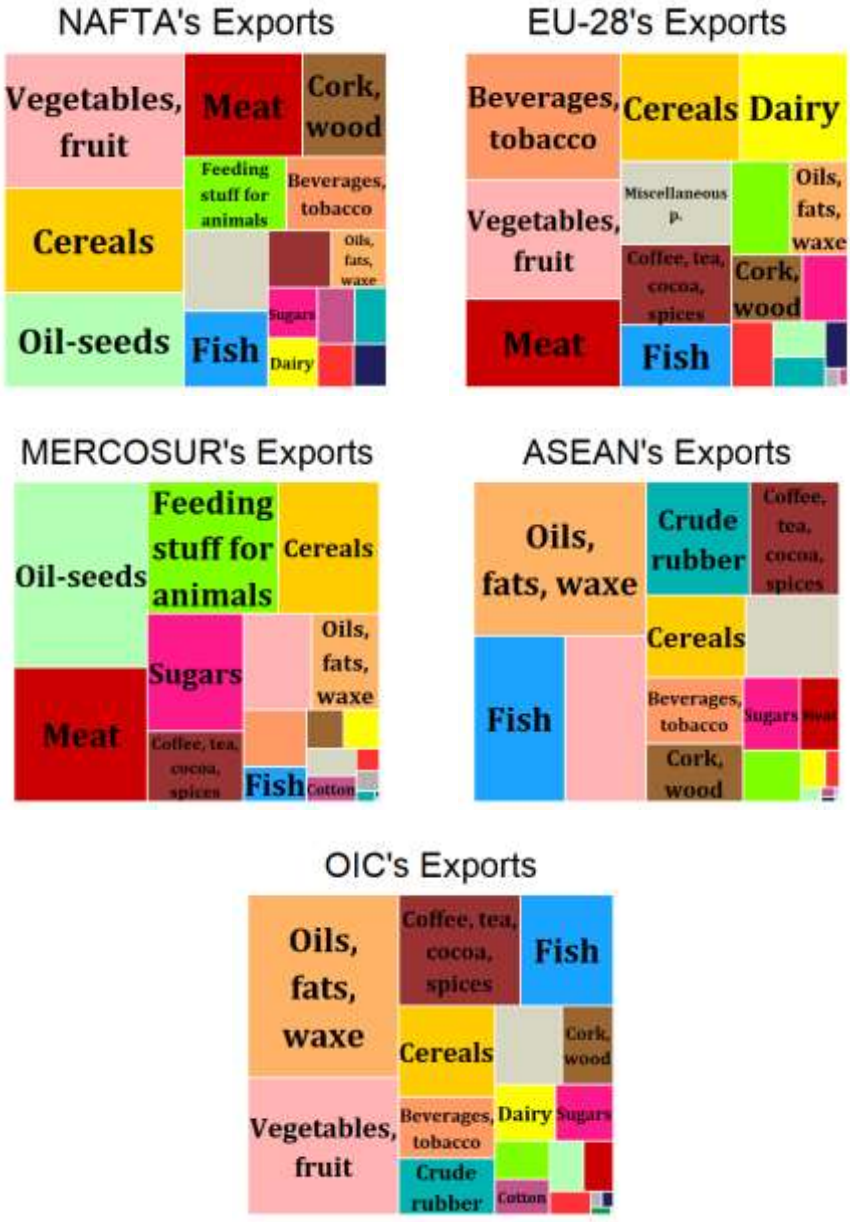
Figure 2. 5 Breakdown of Global Agricultural Trade by Product Divisions, 2016

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

In Figure 2.6, treemaps are used to compare the 4 trading blocs and the rest of the world with regard to top 5 export and import agricultural products divisions. With the exception of oils, fats, waxe as the top product division in their exports of both ASEAN and OIC, none of the other three blocs have overlapping top first division, Among the top three divisions, vegetables and fruit is the only common product division to all four blocs and OIC. NAFTA competes in oil seeds with MERCOSUR. The fact that vegetables and fruit is among the top 5 import divisions of all those

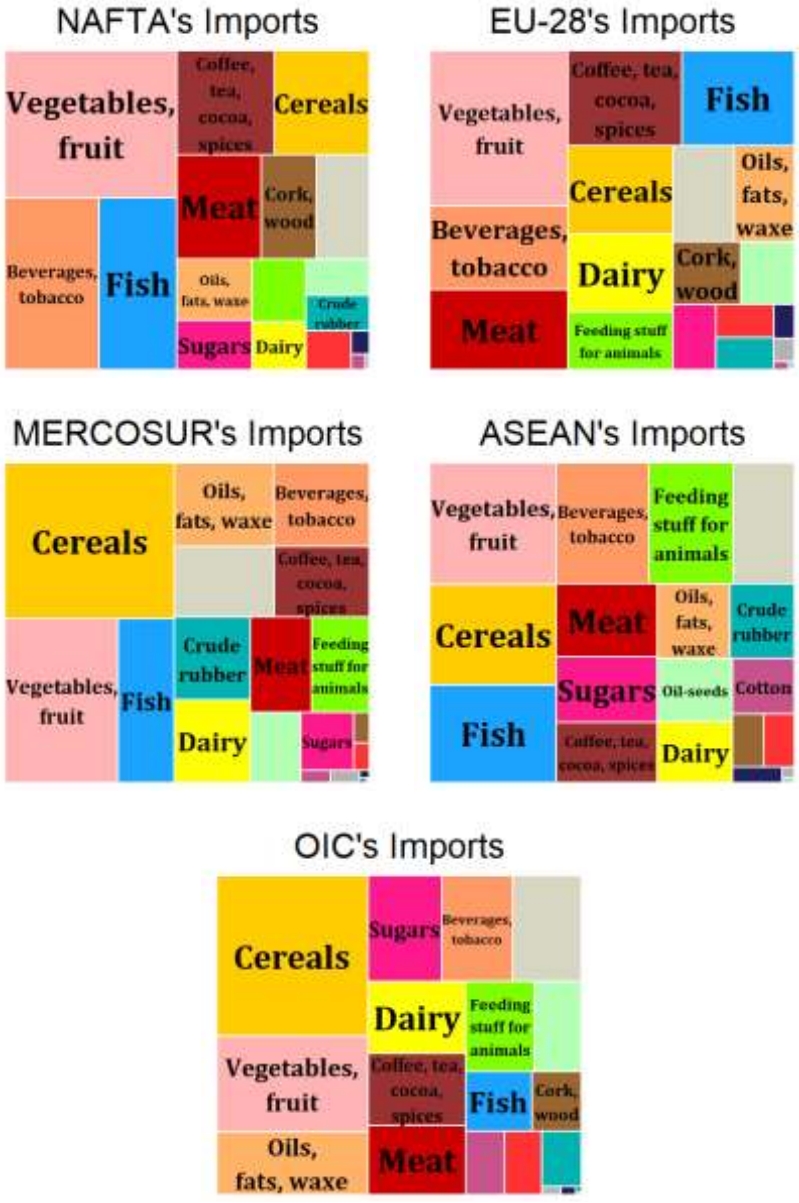
trading blocs or group means there are complementarities due to different sorts of fruits and vegetables differing according to geographic location e.g. tropical fruits. The aggregation at trading bloc level is another reason for which those blocs seem to be exporters and importers of the same agricultural products. For example, since OIC comprises Sudan, Turkey, Algeria and Nigeria which are among the world top 10 lamb producers together with Pakistan and Turkey among the top ten beef producers results in the OIC as a group being both exporter and importer of meat, despite a concrete trade deficit in this category as a whole.

Figure 2. 6 Breakdown of Agricultural Exports by Major Trading Blocs, 2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 2. 7 Breakdown of Agricultural Imports by Major Trading Blocs, 2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 2.2 and 2.3 gives the rank of the top 5 export and import products of the trading blocs as well as OIC, according to the average of 2008-2016, to the average of the last three years and the last year for which data is available, 2016. The ranks are differently colored to permit an easy comparison. In Table 2.2 for the exports, it can be easily seen that NAFTA has only one differing product division entering among the top 5 in the last three years (feeding stuff for animals. For MERCOSUR, EU-28 and the World, top 5 export products divisions have been the same for the

periods considered. For ASEAN cereals moved to the 6th place. For OIC crude rubber seems to use its 5th place to the benefit of cereals.

Table 2. 2 Top 5 Export Products of Major Trade Blocs

		2016		2014-2016 Average		2008-2016 Average	
		Share	#	Share	#	Share	#
NAFTA	Cereals	14.7	2	15.6	2	17.6	1
	Vegetables, fruit	18.9	1	17.9	1	16.3	2
	Oil-seeds	13.2	3	12.6	3	12.6	3
	Meat	9.7	4	9.8	4	9.8	4
	Feeding stuff for animals	5.9	6	6.4	6	5.9	5
	Cork, wood	6.8	5	6.6	5	5.8	6
MERCOSUR	Oil-seeds	21.2	1	22.5	1	19.7	1
	Meat	15.3	2	15.8	2	15.8	2
	Feeding stuff for animals	14.7	3	15.4	3	14.3	3
	Cereals	11.4	4	10.5	4	10.9	4
	Sugars	9.7	5	8.2	5	9.5	5
ASEAN	Oils, fats, waxe	22.7	1	22.9	1	24.5	1
	Crude rubber	10.1	4	10.3	4	14.0	2
	Fish	12.9	2	13.1	2	13.6	3
	Vegetables, fruit	11.5	3	11.1	3	9.3	4
	Cereals	7.1	6	7.3	6	8.0	5
	Coffee, tea, cocoa, spices	8.6	5	8.4	5	7.6	6
EU-28	Beverages, tobacco	15.4	1	15.2	1	15.3	1
	Vegetables, fruit	14.5	2	14.1	2	14.1	2
	Meat	10.7	3	10.7	3	11.0	3
	Cereals	10.0	4	10.3	4	10.3	4
	Dairy	9.1	5	9.7	5	9.9	5
OIC	Oils, fats, waxe	23.6	1	24.2	1	25.5	1
	Vegetables, fruit	17.6	2	17.4	2	15.9	2
	Coffee, tea, cocoa, spices	11.6	3	11.3	3	10.9	3
	Fish	8.8	4	8.3	4	8.0	4
	Crude rubber	4.6	7	5.1	6	7.9	5
	Cereals	7.6	5	7.4	5	7.2	6
World	Vegetables, fruit	16.2	1	15.5	1	14.6	1
	Cereals	10.4	2	10.9	2	11.4	2
	Beverages, tobacco	9.5	3	9.3	3	9.3	3
	Meat	8.8	5	8.9	4	8.9	4
	Fish	8.9	4	8.6	5	8.3	5

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.
Note: Colors represent the rankings. For OIC, NAFTA and ASEAN, 2016 ranking differs from the 2008-16 average and more than 5 product divisions appear in the table.

Table 2. 3 Top 5 Import Products of Major Trade Blocs

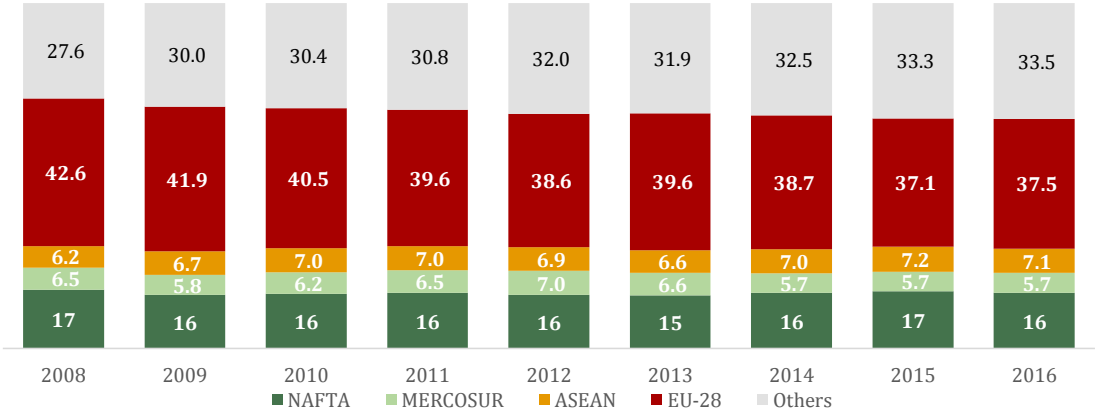
		2016		2014-2016 Average		2008-2016 Average	
		Share	#	Share	#	Share	#
NAFTA	Vegetables, fruit	21.7	1	20.7	1	19.9	1
	Beverages, tobacco	13.9	2	13.3	2	13.3	2
	Fish	11.6	3	11.6	3	11.4	3
	Cereals	8.5	5	8.7	5	9.1	4
	Coffee, tea, cocoa, spices	8.7	4	8.7	4	8.8	5
MERCOSUR	Cereals	22.7	1	20.6	1	21.0	1
	Vegetables, fruit	16.0	2	13.4	2	12.1	2
	Meat	5.0	10	7.7	4	8.1	3
	Oils, fats, waxe	7.1	4	7.4	5	7.4	4
	Fish	7.9	3	7.8	3	7.0	5
	Beverages, tobacco	6.9	5	6.6	7	6.3	8
ASEAN	Cereals	10.9	2	11.8	1	12.6	1
	Vegetables, fruit	13.2	1	11.5	2	9.9	2
	Feeding stuff for animals	8.7	5	9.4	5	9.5	3
	Beverages, tobacco	9.6	4	9.5	4	9.1	4
	Fish	10.6	3	9.8	3	8.7	5
EU-28	Vegetables, fruit	18.5	1	17.9	1	17.3	1
	Meat	9.6	3	9.9	2	10.2	2
	Beverages, tobacco	9.9	2	9.8	3	10.2	3
	Coffee, tea, cocoa, spices	9.3	4	9.0	4	8.3	4
	Fish	9.2	5	8.7	5	8.2	5
OIC	Cereals	20.8	1	22.6	1	24.1	1
	Vegetables, fruit	12.4	2	11.5	2	10.2	2
	Oils, fats, waxe	8.1	3	7.7	3	8.5	3
	Dairy	6.1	7	6.8	4	6.7	4
	Sugars	6.7	4	5.9	7	6.3	5
	Beverages, tobacco	6.5	5	6.4	5	6.2	6
World	Vegetables, fruit	16.2	1	15.5	1	14.6	1
	Cereals	10.4	2	10.9	2	11.4	2
	Beverages, tobacco	9.5	3	9.3	3	9.3	3
	Meat	8.8	5	8.9	4	8.9	4
	Fish	8.9	4	8.6	5	8.3	5

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Colors represent the rankings. For OIC and MERCOSUR, 2016 ranking differs from the 2008-16 average and more than 5 product divisions appear in the table.

With regard to their imports, the situation is not different. Top 5 import products for NAFTA, ASEAN and the World Total did not change during 2008-2016. For MERCOSUR, Meat imports moved to the 10th place as it may be expected, the bloc comprising the world biggest beef producers such as Brazil and Argentina. For OIC, the division which went down 3 ranks is dairy products, leaving its place to beverages and tobacco (Table 2. 3).

Finally, Figure 2. 8 shows the evolution of the global exports value of the top 5 agricultural products according to destinations and Figure 2. 9, for the imports according to origin. For the top 5 export products, the EU-28, NAFTA and MERCOSUR lost share to the benefit of the Rest of the World. Figure 2. 8 confirms that in the global agricultural export markets of the top 5 products, developing countries participate to the competition more than before.

Figure 2. 8 Global Exports of Top 5 Producs by Destinations, %, 2008-2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

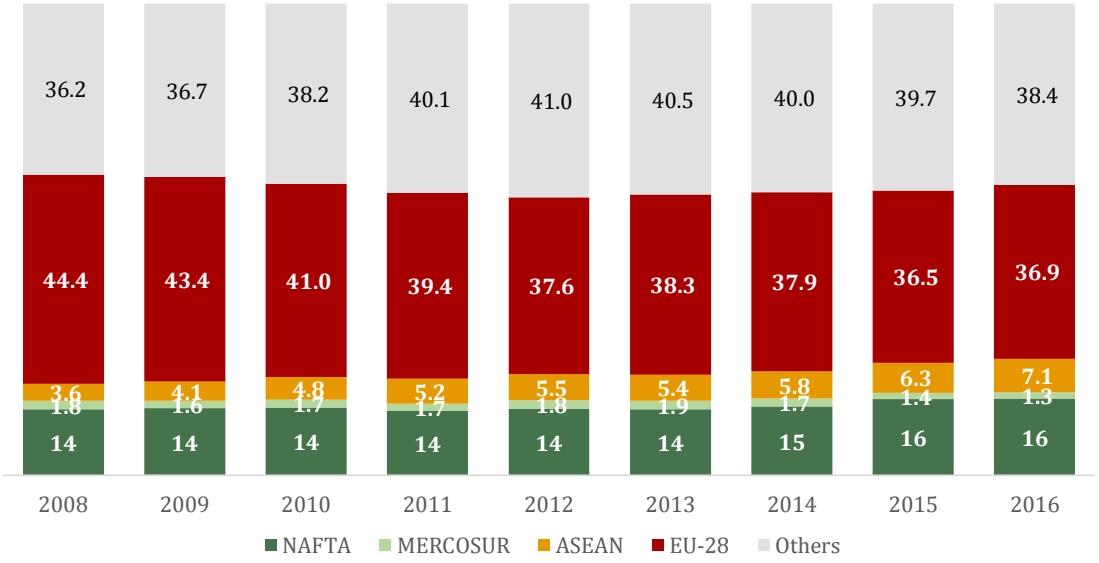
Figure 2. 9 displays that the leading origin group for the imports of the top 5 products changed during the period considered, with EU leaving its leading role to the Rest of the World. It is also worth mentioning that the MERCOSUR group comprising big agricultural countries to begin with Brazil lost share as the top five import products' origin. However, this is due to a successful strategy, diversifying their external trade in agriculture which is worth taken as an example. This explains the choice of Brazil as one of the case study countries in this report.

2.2. Global Agricultural Trade Policy Objectives

The global overarching agricultural policy objective should certainly be considered as the United Nations (UN) Sustainable Development Goal (SDG): "End hunger, achieve food security and improved nutrition and promote sustainable agriculture."

The framework provided by the Uruguay Agreement on Agriculture for trade policy objectives is "to establish a fair and market-oriented agricultural trading system and that a reform process should be initiated through the negotiation of commitments on support and protection and through the establishment of strengthened and more operationally effective GATT rules and disciplines." (WTO, 2018b).

Figure 2. 9 Global Imports of Top 5 Products by Origins, %, 2008-2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The new rules and commitments set by the agreement can be summarized as follows:

- market access— conversion of various non-tariff measures to equivalent bound tariffs;
- domestic support— reduction of subsidies and other programmes, including those that raise or guarantee farmgate prices and farmers' incomes
- export subsidies— reduction in export subsidies and other methods used to make exports artificially competitive, through commitments to reduce subsidized export quantities, and the amount of money spent subsidizing exports.

The Agreement allows governments to support their rural economies, but preferably through policies that cause less distortion to trade. It also foresees some flexibility in the implementation of the commitments such as lower levels for developing countries to cut subsidies or lower tariffs, compared to developed countries, as well as extra time for those obligations. Least-developed countries are exempt from those cuts. The interests of critical countries in terms of reliance on imports for food supplies, and the concerns of least-developed economies are dealt with in special provisions. The most radical decision in agriculture is the abolishment of agricultural export subsidies, while setting the rules for other forms of farm export support, known as the Nairobi Decision and taken at the Tenth WTO Ministerial Conference, in 2015 (WTO, 2015).

The agricultural trade policy objectives culminate from the intersection of the trade policy objectives with those of the agricultural policy and do not exist in a written and concrete form since they comprise internal conflicts such as the necessity to satisfy both export revenue increase and sustain domestic food supply or the rising revenue for farmers together with affordable food prices for consumers.

Global agricultural policy landscape could not be studied without a special glance on the EU's Common Agricultural Policy (CAP) as an example and with the following aims (European Commission, 2018):

- support farmers and improve agricultural productivity, to provide consumers with stable and affordable food supply
- guarantee EU farmers a reasonable living
- help tackling climate change and the sustainability of natural resources
- protect rural areas and landscapes across the EU
- keep the rural economy alive promoting jobs in farming, agri-foods industries and associated sectors

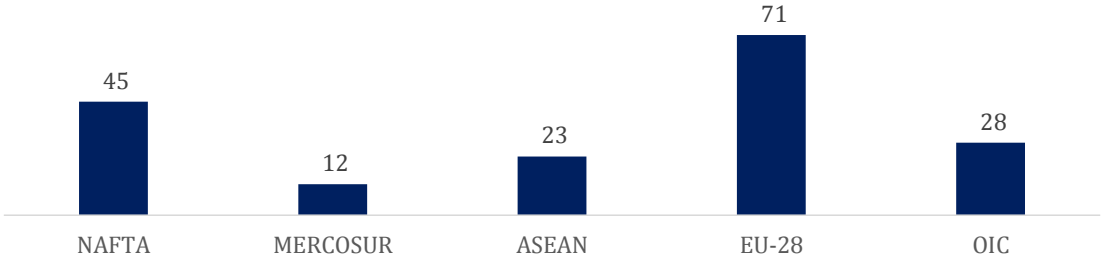
This is how EU is actually a leading global actor in agricultural trade as seen above, despite the fact that its members are mostly developed, industrialized countries, with a leading role in the global trade of services.

2.3. Global Agricultural Trade Policy Measures

Global agricultural products trade is influenced by trade policy measures applied by all countries.

In 2016, more than two third of EU-28 agricultural trade has been realized within the Union (Figure 2. 10). Half of NAFTA's trade took place within the bloc. For the rest of the three blocs, the intra-group trade is much less considerable than EU-28 and NAFTA, the highest share of one third being within OIC.

Figure 2. 10 Share of Intraregional Trade in Agricultural Products, %, 2016



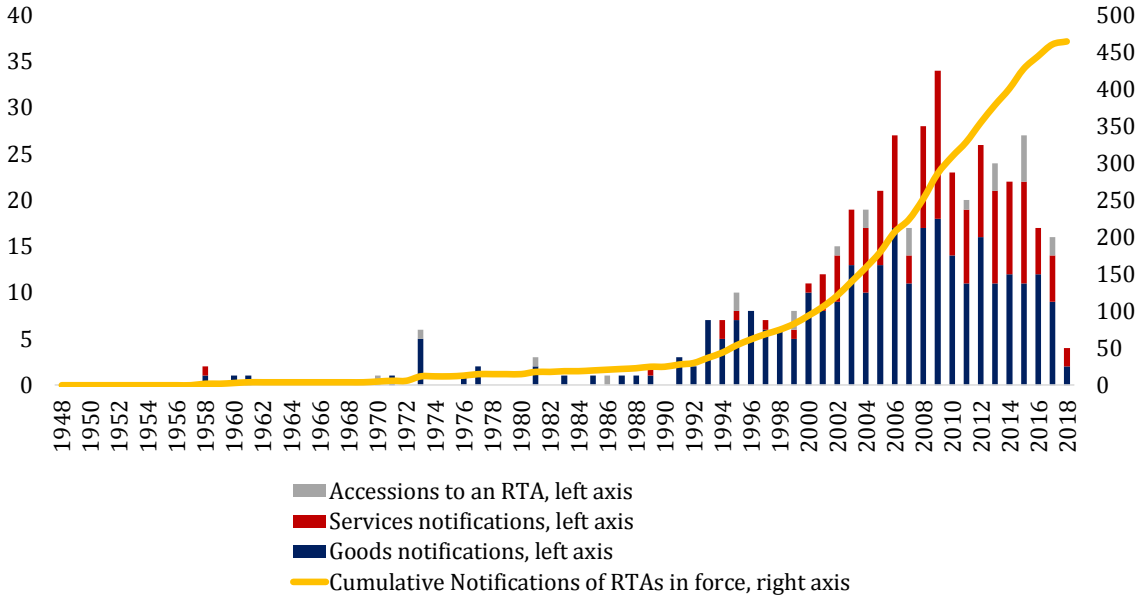
Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 2. 11 displays the evolution of the trade agreements since the mid-20th century. The number of agreements shown by the grey bar is the number of joining an RTA per year which started to increase in the beginning of 90's (left axis). The total number of countries joining an RTA and notifying the WTO[3] (cumulative notifications shown by the yellow line) is actually almost 500 (right axis).

Table 2.4 shows ad valorem equivalent of the average tariff rates in percentage applied by the major trading blocs and the OIC for the three agricultural categories and differentiating between the tariffs applied within the group of the ones applied to third countries.

[3] WTO Members joining an RTA are obliged to notify it to the WTO, under related articles: Article XXIV of the GATT 1994 or the Enabling Clause for RTAs covering trade in goods, or Article V of the GATS for RTAs covering trade in services. In case of RTAs covering both goods and services, two notifications are required. The notification should be made after the ratification of the RTA and before the application of preferential treatment.

Figure 2. 11 Number Of Regional (Reciprocal) Trade Agreements In Force*, 1948–2018



Source: WTO Regional Trade Agreements Information System (RTA-IS), authors' visualizations.
*Note: * As of October 30, 2018*

Table 2. 4 Average Tariff Rates across Trade Blocs, Ad Valorem Equivalent, %, 2016

	Agri-Food		Fish		Agri-Raw		Agricultural Products	
	Within bloc	Outside of the bloc	Within bloc	Outside of the bloc	Within bloc	Outside of the bloc	Within bloc	Outside of the bloc
NAFTA	4.3	5.3	0.0	1.3	0.0	0.2	3.6	4.3
MERCOSUR	0.7	11.3	0.0	3.6	0.0	5.3	0.6	9.6
ASEAN	4.7	10.4	0.1	6.1	0.4	0.5	4.0	8.9
EU-28	0.0	6.6	0.0	4.5	0.0	0.1	0.0	5.7
OIC	7.6	11.0	5.6	7.3	1.4	1.2	7.2	10.1

Source: ITC Macmap, ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The European Union as an economic integration at a much further stage than a customs union has no tariffs in its intra-EU trade. However, EU applies still a higher average tariff rate (5.7%) than NAFTA (4.3%) with the lowest average tariff rate for all agricultural products among the blocs studied. The situation changes somehow when the three categories are considered separately and also with regard to internal tariffs vs. the one applied to the outside. NAFTA applies a tariff of 4.3% within the bloc to agricultural food products vs. no tariff in intra-EU trade within this category, and also a higher tariff than EU to the agricultural raw materials imported from outside (0.2% by NAFTA vs. 0.1% by EU). The highest average tariff rate applied in agricultural food products to the outside is by MERCOSUR with 11.3% exceeding slightly the one of OIC countries. For the imports of fish category, the highest tariff rate to the outside is by OIC. The most important outcome of this analysis is the fact that the highest average tariff rates applied within the bloc is by OIC member countries and in all three categories. This report aims to study how to develop policies to tackle with this problem having major negative consequences on the economic welfare of OIC member states.

Considering that non-tariff barriers' power in protecting the domestic markets is higher than the tariffs, the analysis of the trade measures will be completed with Table 2.5, where the number of measures implemented by trading blocs is given together with the ones applied by the OIC member countries, separately for the three agricultural product categories and also for all members and the ones on a bilateral basis.

In terms of the total number of measures in agri-food category, NAFTA is leading, and mostly to all members and mostly in the form of Special Safeguard Measures (496) followed by Sanitary and Phytosanitary (SPS) measures (84) and Tariff Rate Quotas (TRQ) (78). The second highest number of non-tariff barriers is by the EU-28 (683), with Special Safeguard Measures (305) followed by the TRQ (251) and Export Subsidies (114). This last measure is to be ended according to WTO Nairobi Decisions of 2015 within an allowed time-frame and as explained below. The third most protected country group is OIC member countries with 642 measures in total, mostly of SPS both on bilateral basis (172) and to all member countries (300).

In fish products the most protective country group is OIC (733) and mostly with SPS (172 bilateral and 153 to all members) followed by the anti-dumping measures.

It is well known that NTBs are the most highly difficult barriers to detect, thus the ongoing heavy reliance of all the world big trade actors to them. An additional difficulty is to find related trustable data. The fact that OIC has the highest number of SPS for agri-food and fish products vis-a-vis OIC members is a clear evidence that those measures are used as protectionist measures and even towards OIC member states.

The raw materials trade is the most liberalized category, with very few non-tariff barriers.

The Ministerial Decision of Nairobi 2015, required all developed countries to immediately remove export subsidies, except for a few agricultural products to be followed by developing countries in 2018, with a longer period in a few cases. Developing countries will benefit from the flexibility of covering marketing and transport costs for agricultural exports until the end of 2023. The Nairobi Decision permitted the poorest and food-importing developing countries to use more time to abolish export subsidies (WTO, 2015).

Other export policies, such as export financing ease, international food aid and support provided by the exporting state trading enterprises of agriculture, can be used to maintain agricultural exports and recover the effects of the removal of export subsidies.

Table 2. 5 NTMs by Major Trading Blocs (Number of Measures Implemented)

		Agri-food Products					Fish Products					Raw Materials				
	Imposing member	NAFTA	MERCOSUR	ASEAN	EU-28	OIC	NAFTA	MERCOSUR	ASEAN	EU-28	OIC	NAFTA	MERCOSUR	ASEAN	EU-28	OIC
All Members	Export Subsidies	23	74	1	114	40					41		2			
	QR	24	1	44		17	10		11		47	9		15		5
	Safe guards										6					
	SPS	84	137	224	4	300	9	12	31		153	1	3	3		1
	Special Safe guards	496		11	305							7			2	
	State Trading Enterprises	4		6	1	8	1				17	1				
	TRQ	78	59	52	251	44					42	5		1		
	TBT	54	26	12	8	17	19	5	1	0	34	13	2	1		3
Bilateral	Anti-Dumping	23	6	1			6				219	4				1
	Counter-veiling	5									1	1				
	QR										1					
	SPS	6	25	99		216	1	2	2		172		1			3
TOTAL		797	328	450	683	642	46	19	45	0	733	41	8	20	2	13

Source: WTO I-TIP, ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.
Note: QR, SPS, TRQ, and TB, are the abbreviations of following terms, respectively: "Quantitative Restrictions", "Sanitary and Phytosanitary", "Tariff-rate quotas", and "Technical Barriers to Trade"

2.4. Conclusions and Lessons Learned

10% of the world population living in low income countries and producing 4% of world agricultural output is facing a fierce competition in this sector's global trade resulting in their share being only 7% in global agricultural exports (World Bank, 2018). Middle and high income countries realize the lion share of the global agricultural production, supporting and protecting their agriculture in order to increase agricultural exports, since their comparative advantages lay in industry and service sectors.

A symposium jointly organized by WTO Agriculture and Commodities Division together with the Institute for Training and Technical Cooperation concluded that there is a need for regulated and increased trade, to improve global welfare by helping the producers while addressing the challenges of sustainably providing food to the growing global population.

Between 2008-2016, the world's total agricultural exports grew by 2.35% annually. While ASEAN's and NAFTA's growth rates have been 3.95% and 2.37% respectively, the Rest of the World composing of low and lower middle income, developing countries mostly recorded the highest growth rate of 4.23%. Since OIC member countries are largely in this group[4], and most of them rely heavily on agriculture, the need for increasing their exports is a crucial issue thus this report's aim of policy recommendations for intra-OIC trade in agricultural products. Reference to the economic performance of countries is particularly important since agriculture is directly impacting food security and actually 21 member states of OIC figure among LDC (United Nations, 2018).

Some global trends which came out of the analysis above need to be particularly taken into consideration for those policy recommendations. Those are:

- The trading blocs have a tendency to leave the raw material exports to the Rest of the World while continuing increasingly to export processed and higher value added agricultural food products. A similar tendency is visible for Fish products.
- The global agricultural exports are concentrating on the top 5 products and on the developing world markets.
- With regard to tariff protection, two groups come out of the analysis: the group of NAFTA and EU-28, with a tariff protection around 5% to third countries and the group of MERCOSUR; ASEAN and OIC with almost two folds of tariff protection. It should be noted that the first group constitute mostly of developed, industrialized countries, the second of developing countries. The fact that the second group's agricultural tariffs are higher may seem paradoxical since their comparative advantages are mostly in agriculture. However, the agricultural trade policies applied by the first group, based on the strategic importance argument of the sector have been successful in increasing productivity and providing strong competitiveness to those countries. Non-Tariff Barriers are also used to that end by both groups. Today, the comparative advantages of the second group are not enough to compensate the difference in productivity and the first group continues to have leading roles in world agricultural trade. Thus low and middle income countries should focus on increasing their agricultural productivity while designing appropriate agricultural trade policies to keep up with the competition of the developed countries in export markets.

[4] Bahrain, Brunei Darussalam, Kuwait, Qatar, Saudi Arabia and UAE from the OIC Arab group are high income economies but with a very low agricultural production and exports.

Chapter 3: Analysis of Agricultural Trade Policies of OIC Member Countries

The agricultural trade policies of the OIC member countries are analyzed in this chapter. The chapter is organized as follows: A general overview of agricultural commodity flows at the product section level/product division level and the three official OIC country groups is presented in Section 3.1. Agricultural trade policy objectives pursued by the OIC countries are discussed in Section 3.2. An overview of the measures that are commonly used by the OIC countries to achieve cross-border and domestic policy targets, including measures that affect imports, exports or domestic production, is presented in Section 3.3. Bilateral trade flows across the OIC country groups/countries at the product division/product level are analyzed in Section 3.4. The aim is to identify key agricultural products whose cross-border flows between the OIC members and third parties could potentially be diverted to boost intra-OIC trade. The main results of the online survey that has been designed to poll various stakeholders in the OIC countries are summarized in Section 3.5. Conclusions and lessons learned from this chapter are collected in Section 3.6.

Figure 3. 1 Map of OIC Countries

Source: Authors' visualizations
Note: Blue, red, and green shaded areas denote Asian group, Arab Group, and African Group OIC member countries, respectively.

3.1. Composition and Patterns of Agricultural Trade in OIC Member Countries

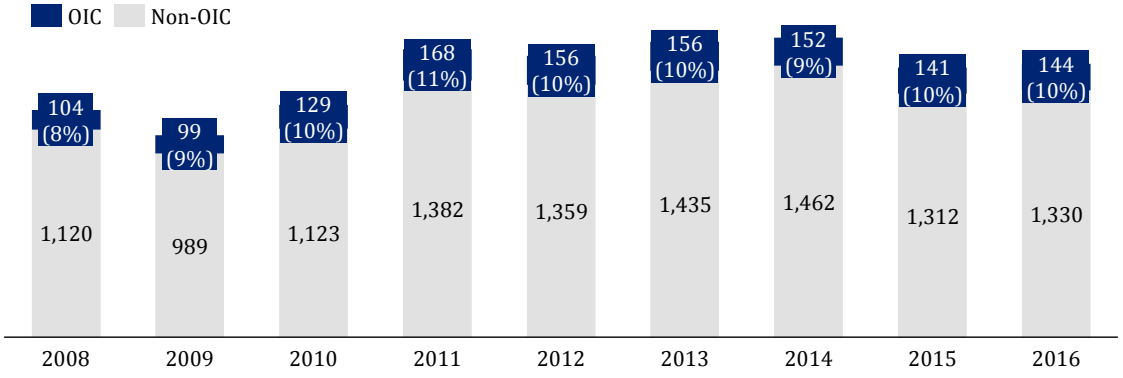
3.1.1. Overview of the agricultural trade patterns

As seen in Figure 3.1, the distribution of the 57 OIC countries covers a wide geographical area contained by a range of countries with diverse economies. Despite its far-reaching distribution across the world, the share of the OIC countries in global agricultural exports and imports has been within the range of 8.5%-11.0% and 12%-15%, respectively during the last decade.

The paths of agricultural product exports and imports of the OIC in the past decade, relative to the global volume of agricultural trade, are shown in Figures 3.2 and 3.3, respectively. Global trade in agricultural products had moderate ups and downs during the decade, reaching its

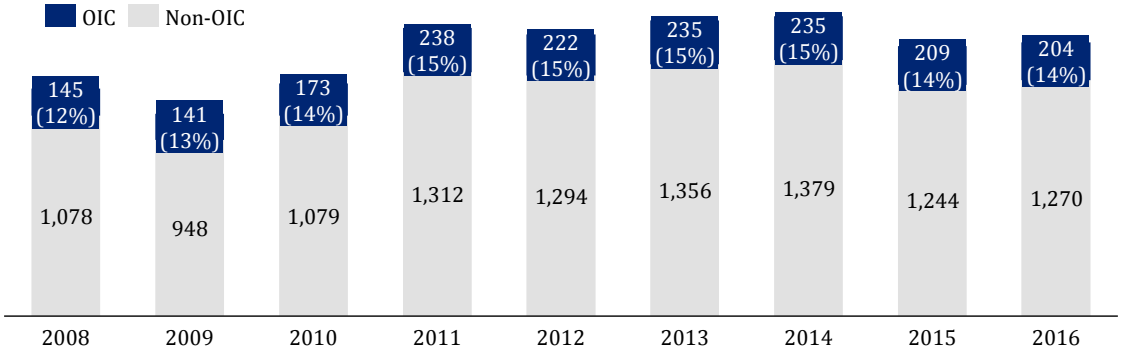
maximum level of 1,614 billion USD in 2014. After 2014, there has been a slight decline in both the world and non-OIC volumes of agricultural trade.

Figure 3. 2 Agricultural Exports: Non-OIC versus the OIC, Billion USD (%), 2008-2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 3. 3 Agricultural Imports: Non-OIC versus the OIC, Billion USD (%), 2008-2016

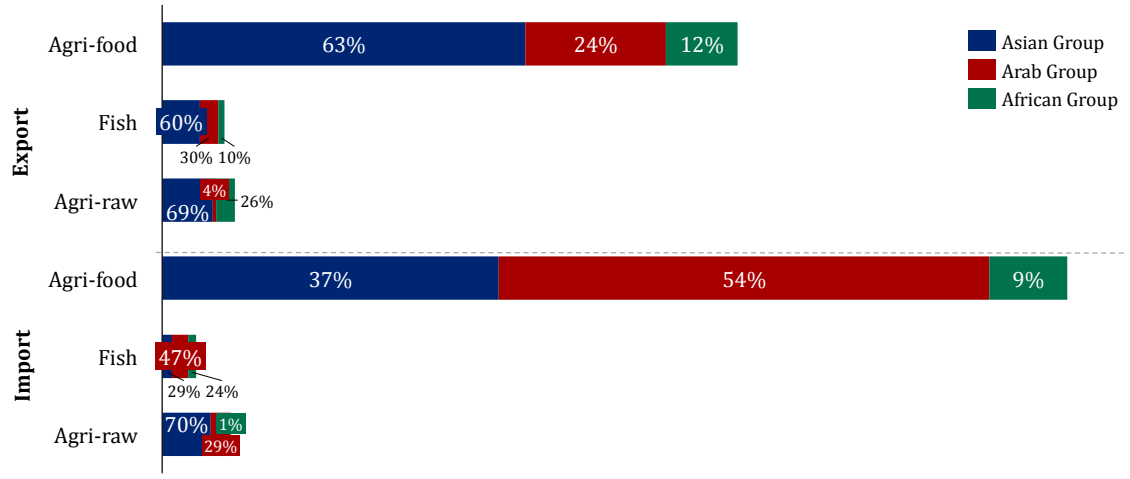


Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The share of OIC countries in world total agricultural exports did not change markedly over the last decade, fluctuating within the range of 8.5 to 10.9%, with an approximate average share of 9.8% (see Table F.1 in Annex F). The share of the OIC group imports in global agricultural trade is between 11.9% and 15.3%, hitting its maximum in 2011, and decreasing thereafter (see Table F.2 in Annex F). The average share of the OIC imports in global agricultural trade has been 14% during the 2008-2016 period. As such, the OIC area as a whole is a net importer, with a larger global share of imports than exports.

The Asian group is undoubtedly the largest exporter of all product groups in 2016 as seen in Figure 3.4. The low export shares of the Arab group and the African group reflect low production potential both with regards to geographical and climatic conditions as well as agricultural production and trade policies of the African and Arab countries. The Arab countries are characterized by high population growth rates and large and rapidly increasing food deficits caused by limited resources resulting with low potential for exports and need for imported goods (McDonnel and Abdel-Dayam, 2012).

Figure 3. 4 OIC Groups' Export and Import Shares, 2016



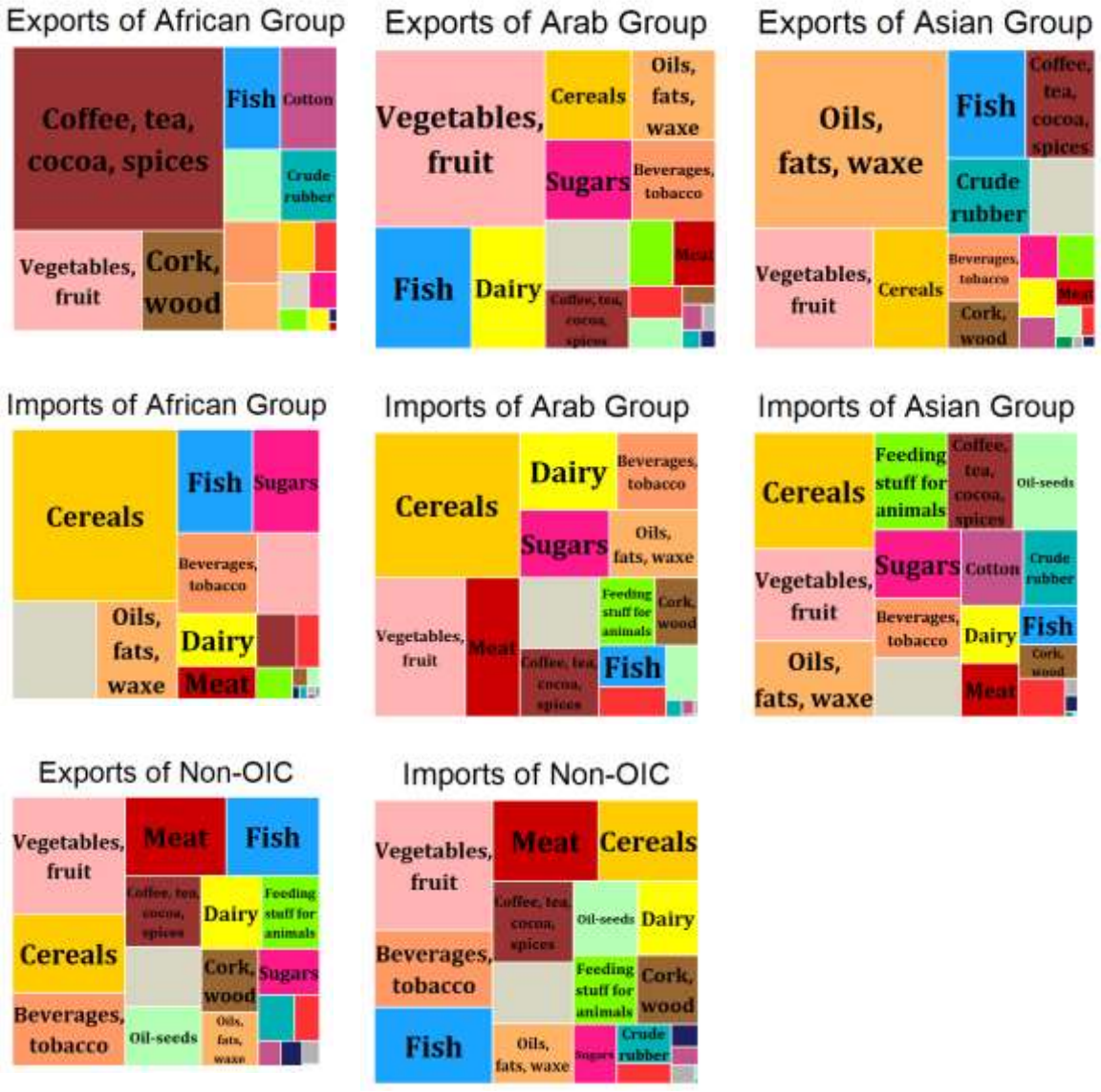
Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: OIC countries' total export volume of agri-food products, fish products and agricultural raw materials are 116, 13, and 15 billion USD, respectively. OIC countries' total import volume of agri-food products, fish products and agricultural raw materials are 183, 7, and 14 billion USD, respectively.

The African countries are not self-sufficient in terms of agricultural production and considerably depend on imported agricultural products rather than being net exporters. Indeed, the OIC agricultural production is mainly concentrated in a limited number of member countries; most notably Indonesia, Nigeria, Turkey, Pakistan, Iran, Egypt, Malaysia, Bangladesh, Sudan and Algeria. More than 75% of the total agricultural products are produced by these member countries (COMCEC, 2017a).

With regards to imports, the Arab group is the largest importer of agri-food products and fish products while the Asian group is the largest importer of agricultural raw materials. The Arab countries supply majority of their food requirements from the foreign countries as reflected from the large share of the Arab countries in total food and fish imports. The Asian group's imports of agricultural raw materials is large in comparison to the other country groups, reflecting the role of Asian countries in using the agricultural raw materials for processing and exporting. The African group countries have lowest shares both in exports and in imports, reflecting low production volumes for creating exports as well as low purchasing power to afford imports of agricultural products. Among the three country groups, it is possible to say that the African group countries are least open to agricultural trade.

In order to demonstrate the export destinations and countries of origins for the import products, the following section presents an overview of the top five export and import product divisions of the country groups for the period of 2014-2016. Tables F.3 and F.4 in Annex F show the average percentage shares of the top 5 export and import products among total import and export value of the three country groups. The tree map in Figure 3.5 shows that the top 5 export and import products differ according to the three country groups. The breakdown of the product groups pictured in Figure 3.5 shows that export combinations for the three OIC groups have distinct patterns, reflecting competitive advantage of respective regions in production of different product divisions. For example, coffee for the African group, oils for the Asian group, and vegetables and fruits for the Arab group stand out as some key product divisions. With regards to imports, cereal is the top import product for all three country groups.

Figure 3. 5 Breakdown of Agricultural Trade by Geographic Groups and Divisions, 2016



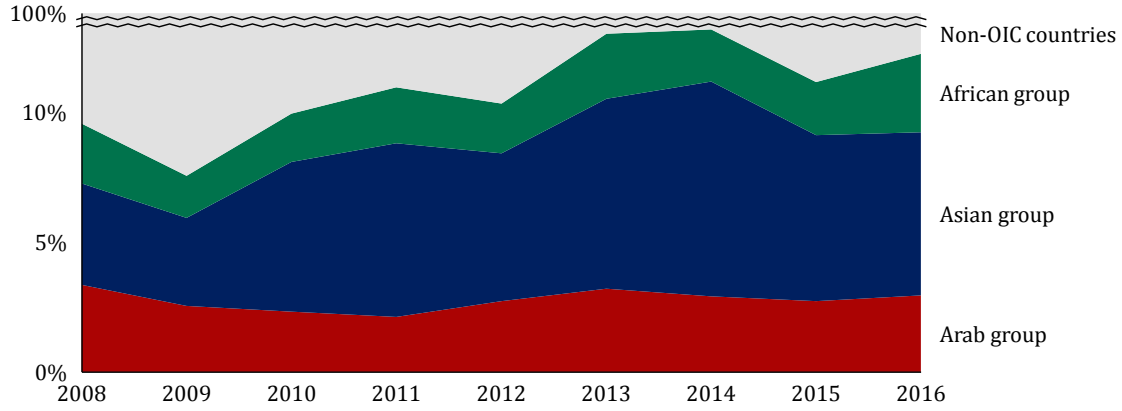
Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

3.1.2. Agricultural trade of the OIC groups by countries of origin and destinations

This section presents the agricultural exports and imports of the OIC country groups according to their top 5 export product divisions identified above. Figure 3.6 demonstrates the export destinations for the top 5 export product divisions of the African group countries according to OIC country groups and non-OIC countries. The figure shows that, among the OIC country groups, the Asian group is the top destination of the African group exports. The share of the Asian group in the African group's top 5 agricultural exports increased from 3.9% in 2008 to 6.3% in 2016. Nonetheless, the shares of the African and Arab countries are lower than the Asian group's share, with percentage shares of 3.0% and 2.9% in 2016, respectively. The share of non-

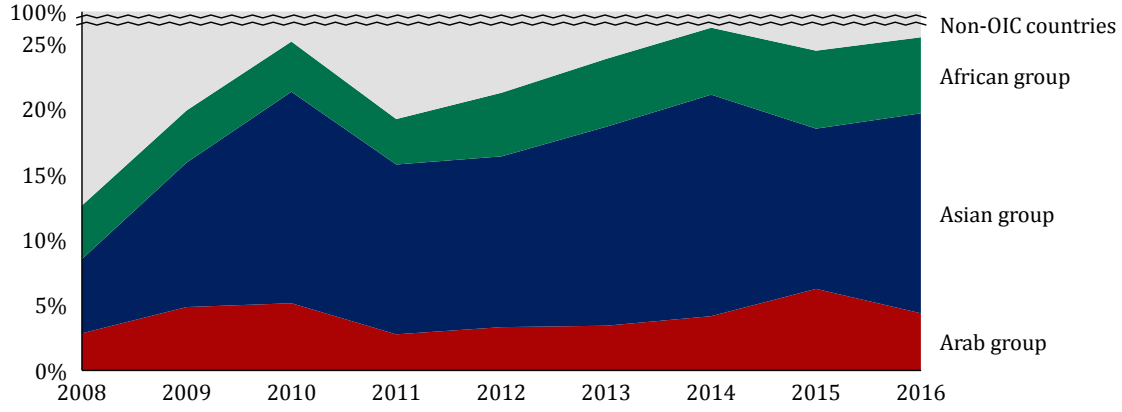
OIC countries in African exports declined slightly during the last decade in favor of the OIC group countries (see Table F.5 in Annex F).

Figure 3. 6 Destination of Top 5 Export Products of African Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

Figure 3. 7 Origin of Top 5 Import Products of African Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

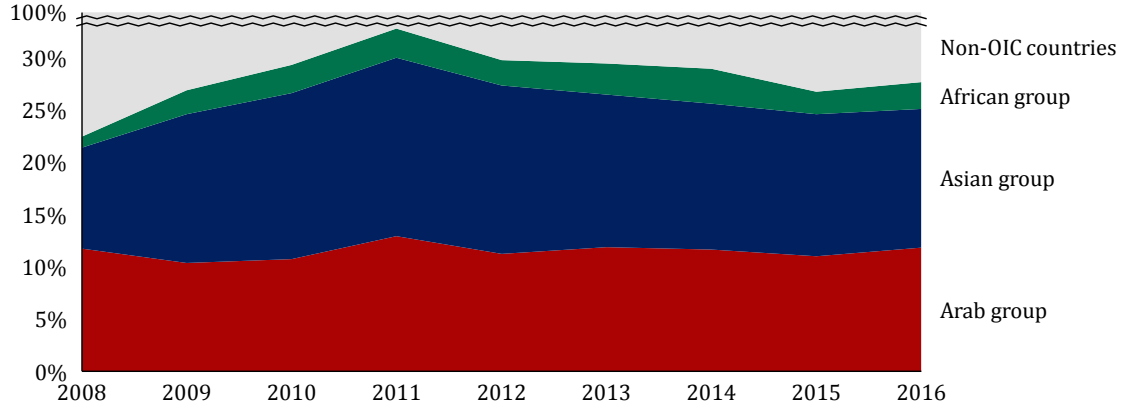
A similar trend is observed with regards to agricultural imports to the African group. The share of the non-OIC group has a slight decrease while the share of OIC countries increased. Figure 3.7 shows the country groups of origins for the African group countries' top import products. The figures reveal that the African group's agricultural imports predominantly come from the Asian group countries. For instance, the share of the Asian group in Africa's imports have increased from 5.7% in 2008 to 15.3% in 2016. The share of the African group remained 5.8%, and the share of the Arab group had been 4.4% in 2016, respectively (see Table F.6 in Annex F).

With regards to the Asian group countries, the share of the non-OIC countries in agricultural exports and agricultural imports showed a sharp decrease in 2011. The reason might be related to the consequences of the global financial crisis starting from 2008 to 2011 which could have caused the falling share of non-OIC group in Asian trade. Agricultural trade is not an exception in this regard, and especially because the Asian group countries export large volumes of agricultural raw materials. On the other hand, while the global economic crisis hit Asian

economies fast, causing a rapid collapse in Asian exports, the recovery had been quick due to timely macroeconomic measures taken in Asian countries (Heat, 2009).

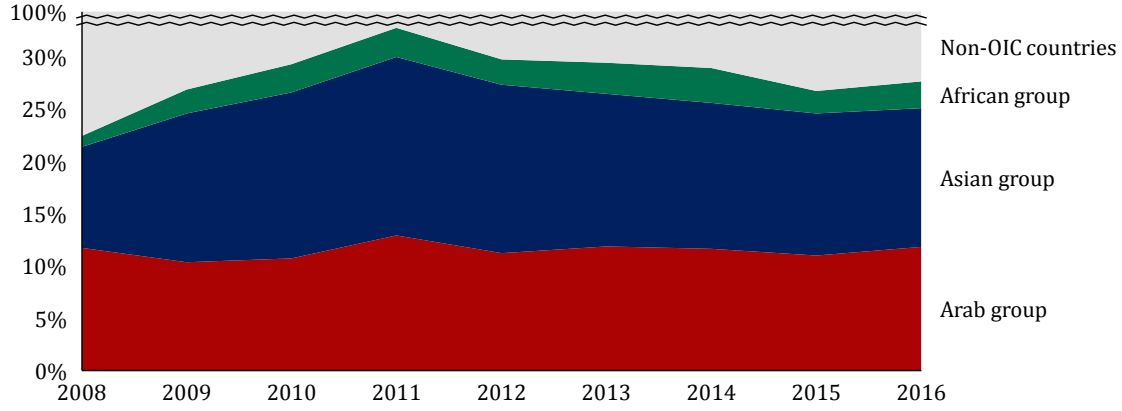
Figure 3.8 shows the export destinations of the Asian group's top 5 export products. The share of the Asian group countries increased from 9.7% in 2008 to 13.3% in 2016. The share of the Arab group countries is nearly equivalent to the share of the Asian group countries in the Asian group's exports, with 11.7% in 2008 and 11.8% in 2016. The share of the African group countries in the Asian group's exports is within the range of 1% to 3% during the 2008-2016 period (see Table F.7 in Annex F). Figure 3.9 presents the regions of origin for the Asian group's top 5 imported agricultural products. The figures reveal that the Asian group countries are the Asian group's top importers of agricultural products. The share of the Asian group countries in the top 5 import agricultural products is 17.1% in 2008 and 20.9% in 2016. The shares of the African group and the Arab group are 1.6% and 3.6% in 2016, respectively (see Table F.8 in Annex F).

Figure 3. 8 Destination of Top 5 Export Products of Asian Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

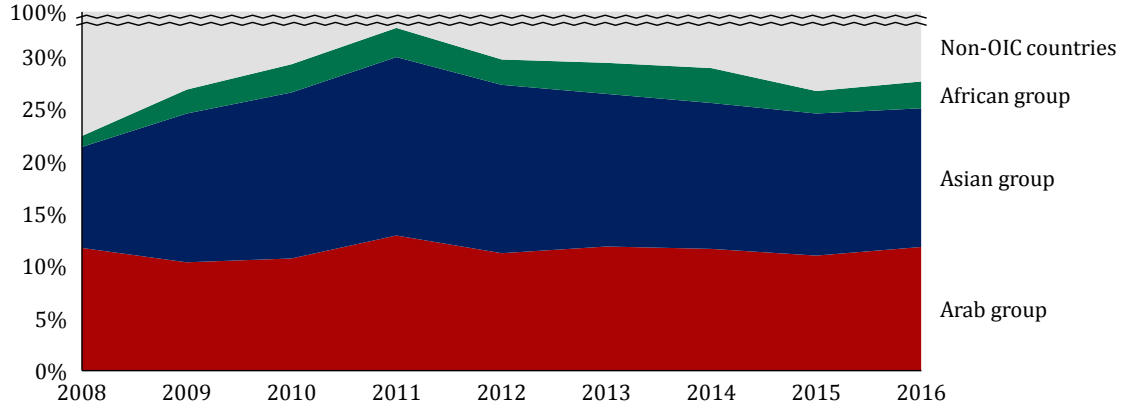
Figure 3. 9 Origin of Top 5 Import Products of Asian Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

With regards to the Arab group exports, its top 5 exported agricultural products to the OIC group largely go to the Arab group countries (Figure 3.10). The share of the Arab group countries in Arab group's exports is 39.5% in 2008 and 47.3% in 2016. The shares of the Asian and African countries in the Arab group's exports are 6.2% and 2.5%, respectively. Similar to the African and the Asian groups, there is a downward trend in the share of the non-OIC group exports (see Table F.9 in Annex F). The imports of the Arab group countries' agricultural products are coming mainly from the Arab group as well (Figure 3.11). The share of the Arab group in the top 5 import products is 12.9% in 2008 and 16.9% in 2016, reflecting an upward trend. The share of the Asian group is 9.2% while the share of the African group is only 0.1%. In Arab group exports, the share of non-OIC countries has been falling over the last decade, analogous with the other OIC groups (see Table F.10 in Annex F).

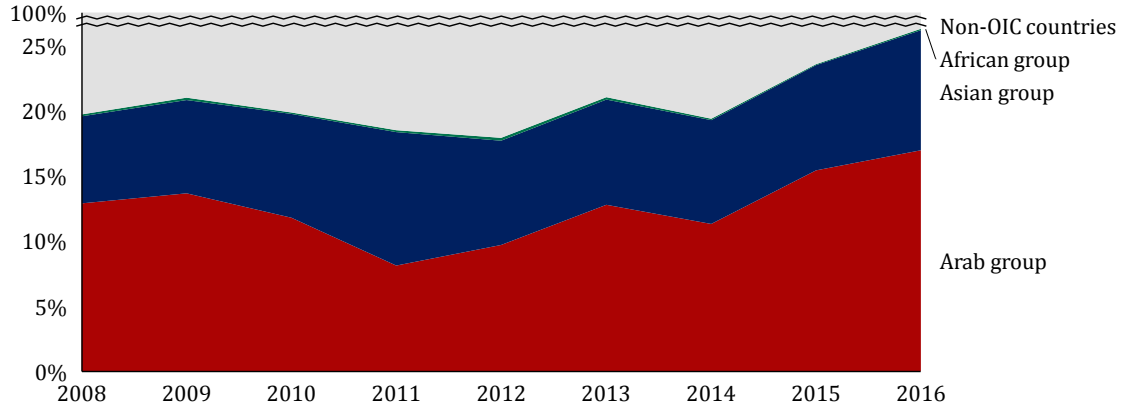
Figure 3. 10 Destination of Top 5 Export Products of Arab Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

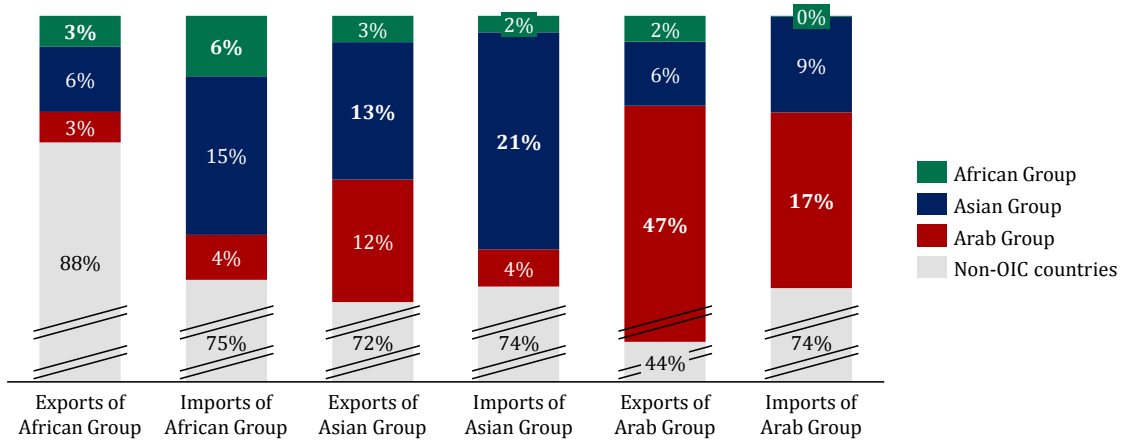
One noteworthy aspect of the main patterns pictured in Figures 3.6 to 3.11 is the following. While the share of non-OIC countries in the top 5 exported and imported products remain rather high in 2016 (ranging from around 44% to 88%), the non-OIC share for all three groups and for both exports and imports exhibited absolute decreases from 2008 to 2016. In other words, there exists a slow but persistent increase in intra-OIC agricultural trade in the top 5 export and import product divisions.

Figure 3. 11 Origin of Top 5 Import Products of Arab Group



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products are identified considering 3 year average between 2014 and 2016.

Figure 3. 12 Breakdown of Agricultural Trade by Partner, 2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The overall situation in the year 2016 is pictured in Figure 3.12. Around ¾ of the imports of all three country groups originate from the non-OIC countries, and non-OIC countries' share as an export destination is highest for the African group, followed by the Asian and the Arab groups. The second largest group of origin for Africa and Asia is the Asian group. The second most important region of origin for the Arab group is yet again the Arab group itself, indicating relatively strong intra-group trade relationships within the region. Within the OIC group, the export destination of the African and Asian groups is largely the Asian group while the export destination of the Arab group is mostly the Arab group. Still, the Arab group's trade ties with the countries in the same group are strongest among all three OIC country groups.

3.2 Agricultural Trade Policy Objectives of OIC Member Countries

Agriculture has been prioritized by the COMCEC Economic Summit of November 2009, and, together with trade, it has also been determined as one of the six cooperation areas of by the COMCEC Strategy, adopted by the 4th Extraordinary Islamic Summit (14-15 Aug. 2012). The strategic objective set for agriculture is "Increasing the productivity of agricultural sector and sustaining food security in the OIC Member Countries." The agricultural trade policy objectives

are framed by this strategy. Despite the lack of a clearly determined set of agricultural trade policy objectives, the elements can be derived from the existing strategy as well as the general trade policy of OIC member countries.

COMCEC (2012) Strategy Report states the objectives as "increased mobility of goods, capital and people" in order to serve as a "catalyst to create convergence between higher and lower income member countries and to enhance peace and stability." Thus, the primary economic aim is to increase international trade of member countries together with the mobility of capital and people. However, studies conducted to determine to what extent this aim is being realized show that while the trade is increasing, this is not always to the benefit of member states, e.g. imports from outside of OIC increasing more rapidly than intra-OIC and exports. COMCEC countries' population represents one quarter of the world population while their share of world trade is limited only around 10%. The level of COMCEC intra-trade is around 19.1%.

To foster intra-OIC trade, COMCEC introduced the Trade Preferential System among the Member States of the OIC (TPS-OIC). Based on three agreements, namely the Framework Agreement, the Protocol on Preferential Tariff Scheme (PRETAS) and the Rules of Origin which entered into force in 2002, 2010 and 2011 respectively, the system now needs the fulfillment of some practical steps by the participating member states for the entry into force. As of September 2018, 14 OIC member countries have submitted their concession lists while 28 fulfilled only partial commitments in terms of signature and ratification of the three agreements. 15 member countries have not participated into the TPS-OIC yet.

In the part related to Trade, the Strategic Objective is stated as the "Expansion of trade among the member countries" (COMCEC 2012: 6). This is foreseen to be attained by liberalizing trade towards which the importance of understanding the opportunity costs of protectionist trade policies are underlined, together with the entering into force of the TPS-OIC, reduction of tariffs, elimination of Non-Tariff Barriers or Measures (NTB or NTM) as well as adequate trade policies and supporting accession to the WTO. Such a liberalization would improve resource allocation and increase economic efficiency in the member countries, being particularly important for low income members.

However, the existing preferential trade agreements of the member countries with neighboring or regional member states, but also with EU and/or USA, create a problem for further integration in the framework of OIC.[5] In most of the cases, those agreements have been signed without conducting impact assessment analysis and limit the capacity of the agreeing states to design independent trade policies. In the case of free trade area (FTA) agreements, for example, member countries have the liberty to continue applying their existing tariffs to third countries, protected against the traffic distortion by the rule of origin. In case of a country member of such an FTA, it would not be possible to form a customs union or to become part of an existing one, since it would imply the adoption of a common external tariff which is against the liberty of independent external tariffs to third countries and the rule of origin of the FTAs.

Other challenges regarding trade facilitation concern logistics and insufficiencies in infrastructure and public services (particularly in transportation). This creates additional costs, affecting agricultural competitiveness negatively. Transport quality is of crucial importance for agriculture since the products are perishable to a large extent. Improving the infrastructure is a requirement in that sense. Agricultural producers, being small and medium-sized enterprises

[5] Such as Agadir Agreement, Common Market for Eastern and Southern Africa (COMESA), Economic Community of West African States (ECOWAS), Gulf Cooperation Council (GCC), Pan-Arab Free Trade Area (PAFTA), West African Economic and Monetary Union (WAEMU). Note that three OIC members are also member of ASEAN. Those are Brunei, Malaysia and Indonesia. Please see Table 3.4 for a matrix of trade agreements.

(SME) in most of the cases, also have problems in reaching trade financing and insurance. Special financial schemes need to be installed for easy access of SMEs. Agricultural SMEs have also problems in reaching international markets. A report by the Islamic Centre for Development of Trade adds to those the lack of diversification in export baskets, failing to fulfill international market requirements such as norms and standards, the need for information on markets and business opportunities, the shortage of technical experts in international trade as well as the scarcity of networking opportunities and marketing activities in other OIC countries (ICDT, 2018).

COMCEC Strategy aims facilitating trade by putting in place less complex trade procedures, by developing the administrative customs capacity, by improving the logistics services for trade and by easy access to direct payments. With regard to trade financing, the Strategy targets to improve the awareness about the financing mechanisms which are already available, while determining new instruments along with the progress of the insurance systems against payment risks.

Finally, COMCEC Strategy attracts the attention to the need for extending awareness of trade projects, as well as improved communication among stakeholders of the member states. Online networks for putting business people in contact are determined as a good communication platform. Capacity development of Trade Promotion Organizations in the member states is also considered important while improving the export strategy and international marketing ability of SMEs.

An example of best practice exists in Morocco within the "Plan Vert."[6] The Plan Vert deals with the above mentioned challenges and support the agricultural sector towards its primary objectives to "strengthen the sector's competitiveness, while promoting inclusive economic growth." With its two pillars, the Plan targets both industrial producers and SMEs separately, as their needs differ. Studies evaluating the achievements of the Plan conclude overall as positive, attracting the attention to the measures required for increasing the benefit (Oulhaj, 2013; Saidi & Diouri[7], 2017).[8] Those measures largely join the above mentioned issues determined as barriers to success of the agricultural trade policies and will be mentioned further in the Case Study section on Morocco in Chapter 4.

3.3. Agricultural Trade Policy Measures of OIC Member Countries

Since the mid-20th century, GATT Rounds made the tariffs fall worldwide. Tariffs applied to agricultural products diminished as well, although less than in industrial goods, since tariffs in agriculture are typically larger than tariffs in non-agricultural sectors. GATT, strengthened with the Marrakesh Agreement establishing the WTO, started the Doha Round in 2001 to reform international trading system through lower trade barriers and revised trade rules with a particular focus on agriculture and on developing countries' economic development efforts. This agenda has been dictated by the increasing importance and a large variety of NTMs at global scale, despite all the efforts mentioned above. NTMs represent a considerable challenge for exporters to access foreign markets, particularly crucial for agricultural exporters from developing countries. The most important NTMs in agriculture are product standards. This may be in the form of documents providing access to a market, or getting a certification consumers seek, e.g. maximum residue limits for pesticide allowed. Those measures are regulated by the

[6] https://gro-intelligence.com/insights/plan-maroc-vert-spotlight-on-moroccos-agriculture-policy
[7] https://halshs.archives-ouvertes.fr/halshs-01613992/document
[8] http://www.femise.org/en/studies-and-research/evaluation-of-the-agricultural-strategy-of-morocco-green-morocco-plan-with-a-dynamic-general-equilibrium-model/

Agreement on Sanitary and Phyto-Sanitary (SPS) Measures and the Agreement on Technical Barriers to Trade (TBT), at the WTO level. Although countries are free to introduce such regulations to protect consumers, they need to be based on scientific grounds and not a concealed protectionist tool. Finally, the most difficult characteristic of NTMs is that they cannot be converted to a common numerical measure since the related regulations are not exactly comparable from one product or measure to another (COMCEC, 2018b).

This section will provide an overview of the existing agricultural trade policy measures in OIC member countries. Keeping in mind that OIC member countries' agricultural exports grew at an average annual rate of 4.2% during the period 2008-2016 versus 4.3% of growth of their imports, there is necessity to revise the trade policy measures in place against agricultural trade deficit, since average annual growth rate of the non-OIC countries' agricultural exports and imports has been 2.2% and 2.1% respectively. Agricultural trade deficit of OIC member countries is increasing to the benefit of non-OIC countries, thus increasing agricultural trade surplus in non-OIC countries. Considering agriculture's positive impact on economic growth being particularly crucial for OIC member countries still at the least developed category or low-income levels, using effective trade policy measures is of utmost importance within OIC. While increasing exports by providing necessary support mechanisms to producers for better and diversified products along with marketing and financing help, protection against unfair practices of developed and developing countries is today crucial for a sustainable agriculture and food security. Lots of big agricultural producers which are competing with OIC member countries in international markets use NTMs to limit their imports, while relying on heavy state production incentives to increase their exports. This is one of the major factors contributing to increasing OIC trade deficit and, hence, to increasing non-OIC trade surplus.

A special case at the WTO level is worth mentioning here since it is the request by four OIC member countries, namely Benin, Burkina Faso, Chad and Mali, known as the Cotton Four or C-4. The request consists of cuts in domestic support, tariffs and export subsidies for cotton. The C-4, for which cotton accounted for more than half of the agricultural export revenues in 2017, contributed to the establishment of a "cotton initiative" within the framework of the WTO during the Cancun Ministerial Conference in 2003. At the Bali Ministerial Conference in December 2013, the WTO members adopted the Bali Ministerial Decision on Cotton in which they restated earlier commitments "to address cotton ambitiously, expeditiously and specifically, within the agriculture negotiations." (ICTSD, 2014). In this context, ministers decided to enhance transparency and monitoring in relation to the trade-related aspects of cotton.

The fact that United States presented a new paper[9] for cotton on September 2018 is a clear evidence of the importance of cotton not only for C-4 but for many other countries to begin with the US, the top one global cotton exporter and leading by a difference of 3.5 fold the second biggest exporter India. In June 2018, the WTO organized a Symposium on the Agriculture Policy Landscape during which specific discussions on cotton were held and resulted in identifying the importance of market-oriented trade as a means to improve cotton farmers' welfare globally. Policies promoting competition from the synthetic fiber market, NTMs, and the need to develop global value chains together with the need of investment in the cotton sector were determined as issues restraining cotton farmers' welfare.

[9] https://www.wto.org/english/news_e/news18_e/agng_20sep18_e.htm

3.3.1. Measures directly affecting imports

According to Table 3.1, the Arab group countries apply the lowest average tariff protection in all three categories both to the OIC and to the non-OIC countries with the exception of agricultural raw materials for which Asian group countries have lower weighted average tariffs. Considering the low export volume of this category for the Arab group compared to their exports in agricultural food products, this can be considered to be controversial since the lowering or total removal of tariffs applied to the raw materials will increase the competitiveness of the food sector. The highest protection is applied by the African group and in all three categories.

The three groups' weighted average tariff rates are higher for non-OIC countries except in the agricultural food products for which the African group's average tariff rate on imports from non-OIC countries is slightly lower than OIC countries. This should be resulting from preferential trade agreements and particularly from the ones established with the European Union with which the continent has historic economic ties. Similarly, the weighted average tariff rate for agricultural raw materials are lower for non-OIC countries in the Asian and Arab groups.

Table 3. 1 Weighted Average Applied Tariff Rates, Ad Valorem Equivalent, %

	Agri-Food		Fish		Agri-Raw	
Importer	From OIC	From non-OIC	From OIC	From non-OIC	From OIC	From non-OIC
African group	13.8	12.4	10.7	12.0	4.9	5.0
Asian group	10.2	12.5	4.7	6.6	1.0	0.8
Arab group	4.9	9.5	3.2	5.8	2.3	2.1

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 3. 1 also shows that, among all three groups, the group which positively discriminates the most intra-OIC trade is the Arab group with a weighted average tariff rate relatively much higher for non-OIC countries for agricultural food and fish categories.

Table 3. 2 shows the last three years' average tariff rates applied by the groups to their top 5 import products. The African group's tariff protection is 3.1% for the imports from the same group, 18.9% from the Asian group and 17.0% from the Arab group. However, the African group's average tariff rate is only 10.9% for the non-OIC countries, almost two folds of the one applied to the Asian group.

Table 3. 2 Groups' Average Tariff Rates for Their Top 5 Import Products, %

Importer	From African group	From Asian group	From Arab group	From non-OIC countries
African group	3.1	18.9	17.0	10.9
Asian group	1.3	7.8	13.3	11.9
Arab group	8.6	16.3	0.8	11.2

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: Top 5 products in 3-year average between 2014 and 2016, applied tariff rates, ad valorem equivalent.

Although using the weighted average for a group of countries covers too many details and it is difficult to deduce concrete policy proposals, it is however certain that the existing preferential trade agreements and Free Trade Areas (FTAs) between some African countries with non-OIC

countries and especially developed countries such as USA and EU members, may result in trade diversion due to the higher tariffs to the OIC member countries from the Asia or Arab groups.

The Asian group's average tariff applied to its top 5 imports is 7.8% for imports from the same group, 1.3% for imports from the African group and 13.3% from the Arab group. This means a more preferential rate is applied to the African group, and the highest rate applied to its top 5 imports by any group is the Asian one. Here again the tariff rate applied to non-OIC is lower (11.9%) than the one applied to the Arab group and thus has a potential to divert trade from Arab countries to outside of the OIC.

Table 3. 3 Percentage of Intra-OIC Exports Taking Place within RTAs, 2005 and 2016, %

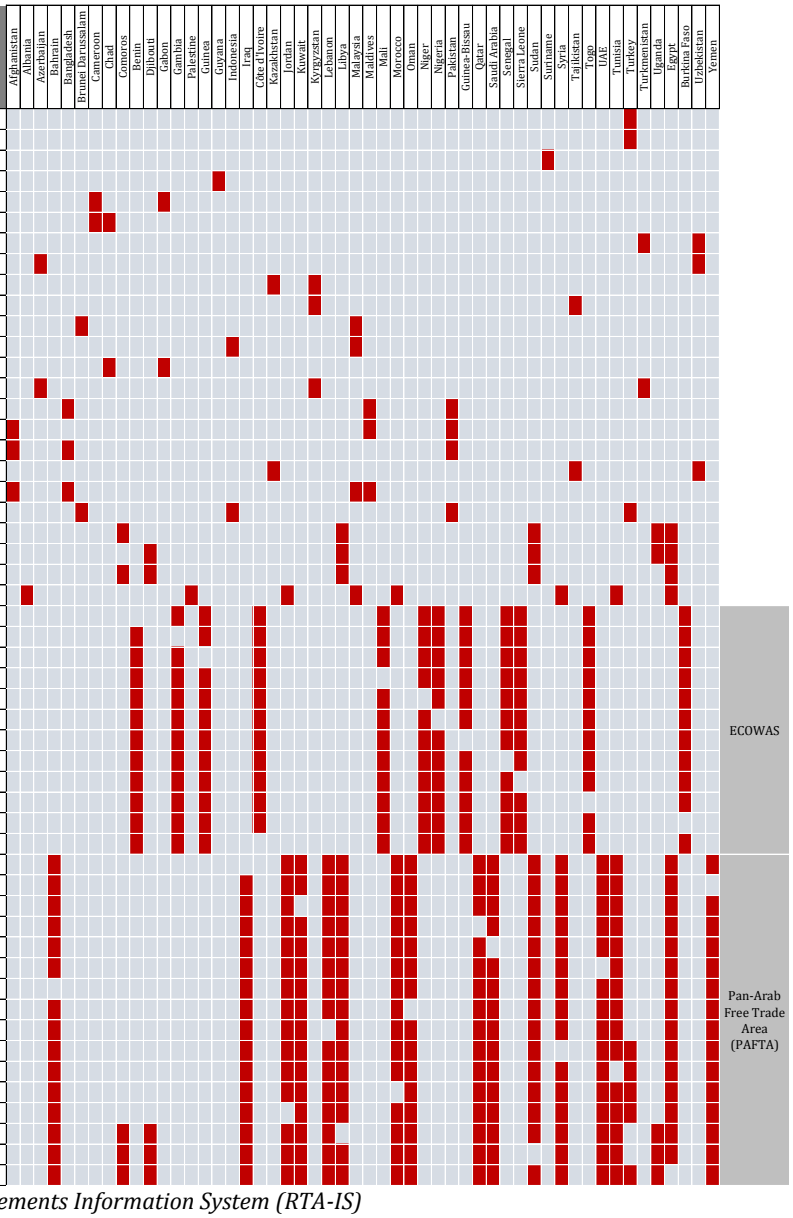
Product	African Group		Arab Group		Asian Group	
	2005	2016	2005	2016	2005	2016
Live animals	99.6	99.95	99.94	98.94	8.02	78.2
Tobacco	83.39	71.56	91.69	50.32	50.9	49.41
Oil seeds	99.93	89.62	72.5	85.98	32.84	47.01
Crude rubber	87.93	98.95	93.75	95.44	51.37	25.62
Cork and wood	97.98	78.34	97.4	96.77	46.3	47.2
Rice	72.94	49.7	96.04	94.16	54.76	42.21
Vegetables	43.05	23.65	93.4	95.85	89.37	69.94
Fruit and nuts	9.38	76.61	97.66	97.84	69.77	63.6
Coffee	91.83	78.85	75.57	83.65	51.76	56.11
Other edible products	98.44	77.69	81.86	74.66	75.7	62.75
Cotton	50.24	59.65	57.93	99.53	90.81	88.97
Bread products	16.7	85.08	88.14	83.22	61.7	55.24
Palm oil	36.5	33.32	94.75	92.11	30.65	28.65
Fish and crustaceans	66.04	45.06	39.78	94.67	88.86	65.92
Cocoa and chocolate	99.19	21.05	87.04	77.91	73.06	72.79
Rest of 06	98.12	91.08	52.83	74.44	96.68	77.58
Rest of 04	99.98	86.1	45.31	99.14	60.46	68.07

Source: COMCEC (2018b).
Note: The product division 04 is for "Cereals and cereal preparations" and the rest of 06 includes those other than wheat, rice, maize, barley, cereal flour, macaroni, and bread. The product division 06 is for "Sugars, sugar preparations and honey" and the rest of 06 includes those other than beet and cane sugar, natural honey, and sugar confectionery.

Finally, the Arab group's average tariff applied to its top 5 imports is 0.8% for imports from the same group, 8.6% for imports from the African group, and 16.3% from the Asian group. Again, the 11.2% of average tariff applied to imports coming from the non-OIC countries is considerably lower than the 16.3% applied to the Asian group, thereby implying a trade diversion risk.

Table 3. 4 Preferential Trade Agreements among OIC Members

Signatory OIC country	Number of partners, total	Number of partners, among OIC members
Palestine	34	1
Albania	40	1
Guyana	44	1
Suriname	44	1
Chad	5	2
Gabon	5	2
Azerbaijan	6	2
Turkmenistan	6	2
Tajikistan	7	2
Kazakhstan	8	2
Indonesia	15	2
Brunei Darussalam	16	2
Cameroon	34	2
Uzbekistan	6	3
Afghanistan	7	3
Bangladesh	7	3
Maldives	7	3
Kyrgyzstan	8	3
Pakistan	9	4
Malaysia	18	4
Djibouti	18	5
Comoros	21	5
Uganda	21	5
Turkey	52	8
Benin	14	11
Gambia	14	11
Guinea	14	11
Mali	14	11
Niger	14	11
Nigeria	14	11
Guinea-Bissau	14	11
Senegal	14	11
Sierra Leone	14	11
Togo	14	11
Burkina Faso	14	11
Côte d'Ivoire	43	11
Iraq	15	15
Yemen	15	15
Kuwait	16	15
Qatar	16	15
Saudi Arabia	16	15
UAE	16	15
Bahrain	17	15
Oman	17	15
Lebanon	48	15
Syria	45	16
Tunisia	49	16
Morocco	50	16
Jordan	52	16
Libya	31	18
Sudan	34	18
Egypt	72	19



Source: WTO Regional Trade Agreements Information System (RTA-IS)
Note: Reciprocal trade agreement between two OIC members, is shown with red shading of the respective cell, otherwise it is shaded with blue.

A look at Table 3.3 would complete the picture about the possible effects of enlarging the existing RTAs to the rest of the OIC countries in other regions. This table is taken from the most recent analytical report of the COMCEC Agriculture Working Group entitled "Analysis of Agri-Food Trade Structures to Promote Agri-Food Trade Networks in the Islamic Countries" (COMCEC, 2018b). The table shows the changes in percentages of intra-OIC exports from 2005 to 2016 for the 15 leading products and for the three OIC country groups.

According to Table 3.3, the most striking example is the increase in the low percentage of intra-OIC exports within RTAs in Asia which was 8.02% for live animals in 2005 and reached 78.20%

in 2016. Two sharp increases are observed within the African group; the percentage share of intra-OIC exports for fruit and nuts went from 9.38% in 2005 to 76.61% in 2016 and for bread products from 16.70% to 85.08%.

However, for the African and Arab groups, out of the 15 observations on leading products, 7 of them show reductions; for the Asian group, there are 10 reductions versus 5 increases. Still, the fact that only in two of the 6 observations for the remaining products in the two categories "06" and "04" show a reduction could be interpreted positively when added to the top 15 products.

The following patterns are identified by analyzing the distribution of existing preferential trade agreements among the OIC countries (see Table 3.4): For the 52 OIC member countries with data availability through RTA databases, the total number of agreements these OIC countries have globally is equal to 1,144. A total of 454 of these agreements are with other OIC countries. On average, an OIC member country has 22 preferential trade agreements globally, and 8.73 of them on average are with other OIC members. The minimum and maximum numbers for the total number of agreements are equal to 5 (Chad and Gabon) and 72 (Egypt), respectively. With the OIC countries, the minimum and maximum numbers are equal to 1 (Albania, Guyana, Palestine and Suriname) and 19 (Egypt). It has also been observed that ECOWAS and Pan-Arab Free Trade Area countries have larger than average preferential trade agreements within the OIC.

Table 3. 5 Within OIC Agreements Signed Not Due to Commitments to Third Parties

Signatory OIC country	Number of partners, total	Number of partners, among OIC members	Albania	Palestine	Kazakhstan	Jordan	Kyrgyzstan	Malaysia	Morocco	Pakistan	Syria	Tunisia	Turkey	Egypt	Uzbekistan
Pakistan	3	1						■							
Uzbekistan	3	1					■								
Kazakhstan	6	1					■								
Syria	29	1											■		
Albania	33	1											■		
Palestine	33	1											■		
Tunisia	33	1											■		
Morocco	34	1											■		
Jordan	36	1											■		
Egypt	37	1											■		
Kyrgyzstan	5	2			■										■
Malaysia	7	2								■			■		
Turkey	51	8	■	■		■		■	■		■	■		■	

Source: WTO Regional Trade Agreements Information System (RTA-IS)
Note: Reciprocal trade agreement between two OIC members, is shown with red shading of the respective cell, otherwise it is shaded with blue.

Table 3.5 complements Table 3.4 by identifying the agreements signed not due to the commitments made to third parties through non-OIC RTAs. Malaysia, for instance, is the signatory of trade agreements with OIC member countries Turkey and Pakistan without being required to have such agreements under some multilateral trade bloc commitments such as thse of the ASEAN. It s easily seen that, among the OIC countries that are signatores of such agreements, most countries have agreements only with a very small number of fellow OIC members.

Table 3. 6 Groups' NTMs (Number of Products Regulated, In Force)

		All Members					Bilateral		Total
	Imposing members	Export subsidies	QR	SPS	TRQ	TBT	SPS	AD	
Agri-Food	African group		11	2		2			15
	Asian group	40	6	188	15	5	58		312
	Arab group			109	29	10	159		307
Fish	African group		1	1					2
	Asian group	1	1	12		1	3		18
	Arab group			4		1	5		10
Agri-Raw	African group		1			1			2
	Asian group		4	1		1	3	1	10
	Arab group					1			1

Source: WTO I-TIP, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations. Note: QR: Quantitative restrictions, SPS: Sanitary and Phyto-Sanitary, TRQ: Tariff Rate Quotas, TBT: Technical Barriers to Trade, AD: Anti-Dumping

In contrast with the cases of tariffs and agreements, data availability regarding the NTMs stands out as a serious limitation. For many OIC member countries, the NTM data at the product division level is not available from the WTO I-TIP and the WITS databases. Notwithstanding these limitations, a look at Table 3.6 showing the number of NTMs reveals that, in terms of number and variety of measures in force, the Asian group is leading with 312 NTMs, compared to 307 NTMs applied by the Arab group in agricultural products. Although the numbers are quite insignificant compared to the agri-food category, the second highest numbers are in fish products, again with the Asian group leading and being followed by the Arab group. The available data indicate that the African group applies only one quantitative and one sanitary or phyto-sanitary measure. The product category least protected by the OIC member countries with NTMs is the agricultural raw materials. The most widely used NTMs are by far sanitary and phyto-sanitary measures both applied to all members (217 in total) and bilaterally (228). Here, the low use of those measures by the African group needs to be underlined as only 3 measures in this category are applied to all members.

3.3.2. Measures directly affecting exports (Export procedures and requirements)

Measures directly affecting exports are mostly hidden and difficult to detect. The WTO database provides only the number of products for which export subsidies are in force. The Nairobi Decision of 2015 was considered as the "most significant outcome on agriculture" in the WTO's 20-year history. One of the most central decisions of the Nairobi Package is a Ministerial Decision on Export Competition, including a commitment to eliminate subsidies for farm exports. The agricultural decisions also comprise public stockholding for food security, a safeguard mechanism for developing countries, and measures related to cotton. There were also specific decisions to provide preferential treatment for least developed countries (LDCs) in the area of services and the criteria to be used for allowing trade preferences to the exports from the LDCs. Ministers noted that the Global Financial Crisis in 2008 resulted in lowering global economic growth, depressing agricultural prices, raising inequalities and unemployment.

Table 3. 7 Measures Affecting Production and Trade (according to FAPDA Classification)

	Consumer oriented policies	Producer oriented policies	Trade oriented policies
Egypt	10	7	9
Lebanon	3	4	1
Morocco	1	-	2
Saudi Arabia	-	1	-
Tunisia	-	6	-
Arab group total	14	18	12
Arab group average	4.6	4.5	4.0
Afghanistan	10	20	6
Azerbaijan	3	3	1
Bangladesh	6	8	5
Guyana	1	2	-
Indonesia	4	18	9
Iran	1	6	-
Kazakhstan	15	17	6
Pakistan	5	4	8
Suriname	1	1	-
Tajikistan	1	-	-
Malaysia	-	1	-
Asian group total	47	80	35
Asian group average	4.7	8.0	5.8
Burkina Faso	20	14	1
Mali	3	4	-
Mozambique	3	3	1
Nigeria	11	37	7
Senegal	1	7	3
Uganda	5	3	1
Sierra Leone	-	1	-
African group total	43	69	13
African group average	7.1	9.8	2.6
OIC total	104	167	60
OIC average	5.4	7.9	4.2

Source: FAO FAPDA

The decision to strengthen the multilateral trading system was explained for "inclusive prosperity and welfare" for the WTO Member countries and especially for the least-developed ones. In this regard, they also attracted the attention to the potential benefit which could be expected from the Agreement on Trade Facilitation (TFA)[10] as the first multilateral agreement since the establishment of the WTO. However, they also noted that much less progress has been made in agriculture. In this regard, it should be noted that the lack of success in the Doha Round did result in a multitude of bilateral agreements and FTAs, comprising the risk to prevent possible multilateral agreements by groupings such as the OIC.

[10] Trade Facilitation Agreement (TFA): Entered into force on 22 February 2017, it encloses provisions for accelerating the mobility, release and clearance of goods. Effective cooperation between customs and related authorities are also covered, as well as technical assistance and capacity building.

3.3.3. Measures affecting production and trade

COMCEC's (2015: 81) previous research on farmer organizations in the OIC member countries shows that there generally exist a reasonably strong institutional capacity and a long tradition of these institutions. But it has also been established that, in many OIC countries, majorities of farmers do not benefit from these farmer organizations as they are not (active) participants, and these groups of agricultural producers are typically smallholder farmers.

Irrigation, water management and soil salinity also remain to be important problems for many OIC member countries, especially for some of the countries in the Arab and African groups. According to COMCEC (2013), many countries are dependent on rain-fed agriculture even though recent decades have witnessed increased levels of investments in irrigation projects. The main policy problem is identified as the demand-based water distribution approach that does not help developing a planned delivery system that takes into account various factors such as climate conditions, soil salinity and water-yield relationships (COMCEC, 2013: 61).

The COMCEC Strategy referred above states that "Increasing the productivity of agriculture sector and sustaining the food security in the COMCEC region" is a strategic objective regarding the agriculture. Such a strategic objective is expected to increase productivity, develop the regulatory framework and institutional capacity, and provide reliable and up-to-date data while improving market performance and access. Training and capacity-building programmes, encouraging entrepreneurs and farmers towards larger volumes of investment, provision of know-how and technology, improved research services, reduction of post-harvest losses and developing irrigation opportunities and adopting efficient techniques are proposed as necessary actions to take for increasing productivity.

Developing resilience of agricultural sector towards future crises; increasing administrative public capacity and effectiveness; enhancing cooperation in disaster management and climate change; improving legal, institutional, structural and administrative frameworks; increasing transparency of agricultural markets while improving the capacity of member states to design agricultural trade policy, especially in the LDCs, are the actions considered to be required for the Regulatory Framework and Institutional Capacity.

The COMCEC Strategy attracts the attention to the importance of reliable and up-to-date data for successful agricultural trade policy and foresees to develop both the member countries' capacity and increased collaboration with regional and international organizations.

The final action area is stated as market performance and access, and the Strategy foresees to create and develop market institutions, to promote integrated value chain approach, to develop the market access capacity of SMEs, especially for Low Income and the Least Developed Member Countries' agricultural products in the intra-OIC, regional and global agricultural trade.

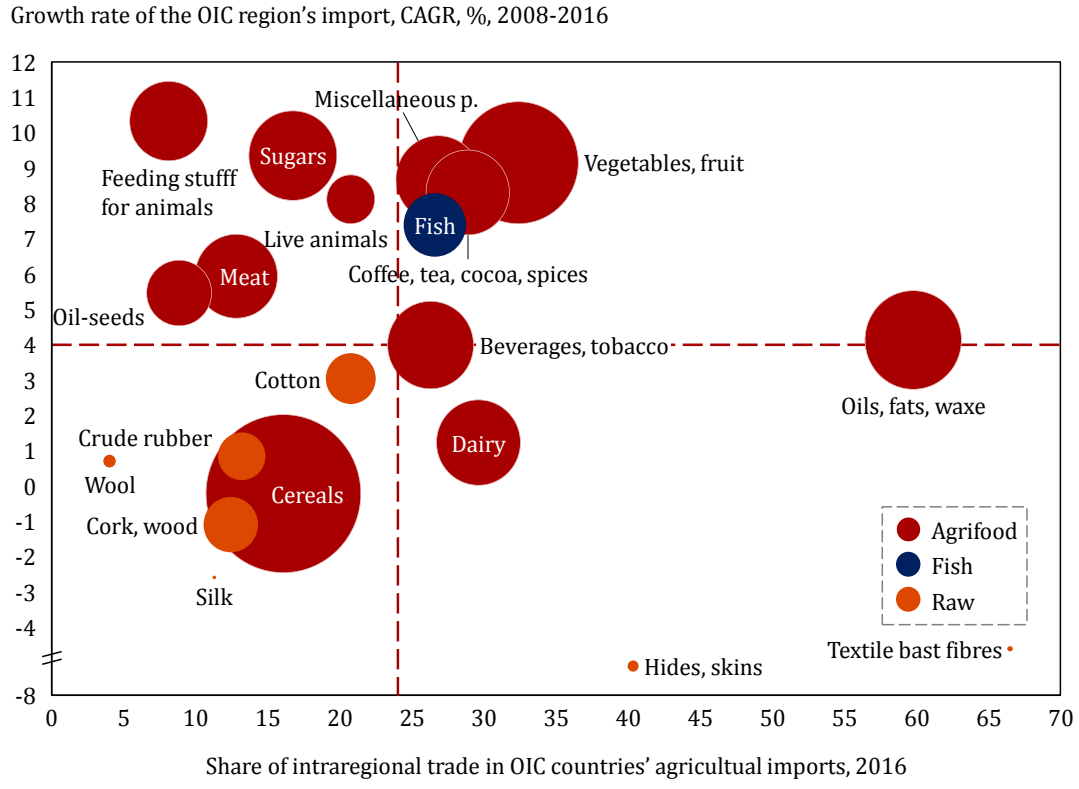
On the other hand, being aware of the importance of Transport and Communication Policies in the success of the trade liberalization, the OIC member countries adopted "Improving the functioning, effectiveness and sustainability of transport and communications in the Member States" as another strategic objective.

A comprehensive documentation of agricultural policies that affect production and trade in the OIC countries does not exist. A database that covers agricultural policies across countries is the one developed by FAO. This database, FAPDA (Food and Agriculture Policy Decision Analysis), offers a web-based tool that allows the users to search policy tools that are used by the countries.

The FAPDA tool covers three groups of policies. Consumer oriented policies are the policies that aim to improve food security and nutrition. The consumer oriented policies cover measures such as tax, social protection, market management, disposable income, nutritional and health assistance. Producer oriented policies cover policy tools whose purpose is to support farmers. The measures that are covered by producer oriented policies are production support, market management, natural resources management and institutional and organizational measures. The trade oriented policies whose aims are to support consumers and producers cover measures directly affecting imports, exports, trade related measures and macroeconomic policy decisions.

Table 3.7 presents the policies that are currently practiced in the OIC member countries according to the available data from FAPDA. The figures reveal that there are a total of 167 producer oriented policies and 60 trade oriented policies. These numbers are again sensitive to the number of countries for which data is available, but the plain averages across groups do not exhibit considerable differences with respect to the policy orientation.

Figure 3. 13 Quadrant Scatter Graph: OIC



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Bubble size represents total import volume of OIC countries.

3.4. Bilateral agricultural trade flows and policy analysis

As presented in Section 3.1 above, the share of the non-OIC countries in the external trade of the top 5 export product divisions of the OIC group countries demonstrates a slight downward trend, particularly for the African and Arab group countries, and this points to a potential to increase intra-group trade within country groups. Such diversion in trade is not evident for the

Asian countries. This section aims to explore potential trade promotion possibilities across the OIC countries as a whole (rather than within the country groups) in order to reveal possibilities in enhancing intra-OIC trade in agricultural products.

The first part of the analysis presented in Section 3.4.1 is at the product division and regional levels. In order to identify unexploited potential trade matches at the product level, a simple graphical layout (quadrant scatter graph) is devised to highlight the key product divisions that can be targeted for the promotion of intra-OIC agricultural trade. The central idea of the scatter graph layout is to identify key product divisions to promote intra-OIC trade.

In the scatter graph, the x-axis presents the "share of intraregional trade in OIC countries' agricultural imports" of the product (i.e., the percentage share of intra-OIC product imports in total OIC imports of the product). The x-axis provides information on the current share of the product in intra-OIC trade.

The y-axis provides information on the "growth rate of the OIC region's imports" of the product (i.e. the percentage growth rate of the OIC imports of the product). The y-axis provides a proxy for the future growth of demand for the product. For the x-axis, the most up-to-date year, 2016, is taken into account. For the y-axis, the growth rate is measured by Compound Annual Growth Rate (CAGR) formula for the time period from 2008 to 2016. Moreover, the bubble sizes of each product division represent the total import volume of the OIC member countries in 2016.

Table 3. 8 Potential Key Product Groups (Divisions) for Intra-OIC Trade Promotion

Division	% of intraregional trade in OIC countries' agricultural imports, 2016	% growth rate of the OIC imports, CAGR, 2008-2016	Total OIC imports, billion USD, 2016	Threshold: % of intraregional trade in OIC countries' total agricultural imports, 2016	Threshold: % growth rate of the OIC total agricultural imports, CAGR, 2008-2016
Sugars	16.7	9.3	13.7	24.2	4.3
Meat	12.8	5.9	12		
Feeding stuff for animals	8.1	10.3	10.8		
Oil-seeds	8.8	5.5	7.5		
Live animals	20.7	8.1	4.1		

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

In this specific setup, a dashed line (i.e. a threshold) divides the x-axis. The threshold represents the share of intra-OIC agricultural imports in total OIC agricultural imports in 2016. The product divisions whose percentage shares in OIC imports are lower than percentage shares of overall OIC agricultural imports are located on the left side of this threshold. In the case of the y-axis, the threshold represents the growth rate of the OIC total agricultural imports, CAGR, 2008-2016. The product divisions whose growth rates are higher than the OIC's total agricultural import basket are located on the upper side of this threshold. The key products for further analysis are the ones with low intra-regional trade and high growth rate that are located on the upper left-hand side of the graph (see Figure 3.13).

Following the explanations summarized above, 5 product divisions are identified which have a high growth rate and low level of intra-regional integration:

- Sugars, sugar preparations and honey (abbreviated to "sugars")
- Meat and meat preparations (abbreviated to "meat")
- Feeding stuff for animals
- Oilseeds and oleaginous fruit (abbreviated to "oilseeds")
- Live animals

Table 3. 9 Criterion for Taking Place in the List of Potential Importer Countries

Criteria in short	Criteria in detail
Be an importer in 2008	Country's total import volume in the specific product division for the year 2008 ≥ 1000 $
Be an importer in 2016	Country's total import volume in the specific product division for the year 2016 ≥ 1000 $
Have a high import growth rate (2008-2016)	Country's import growth rate in the specific product division ≥ OIC's import growth rate in general agricultural products (4.3%)
Have a low intraregional integration while importing in 2016	Share of OIC in the import of the country in the specific product division ≤ Share of intraregional trade in OIC countries' total agricultural imports (24.2%)

Source: Authors.

Table 3. 10 Criterion for Taking Place in the List of Potential Exporter Countries

Criteria in short	Criteria in detail
Be a substantial exporter in 2016	Country's total export volume in the specific product division for the year 2016 ≥ One in 10 thousand of total exports in the relevant product division worldwide
Have a low intraregional integration while exporting in 2016	Share of OIC in the export of the country in the specific product division ≤ Share of intraregional trade in OIC countries' total agricultural imports (24.2%)

Source: Authors.

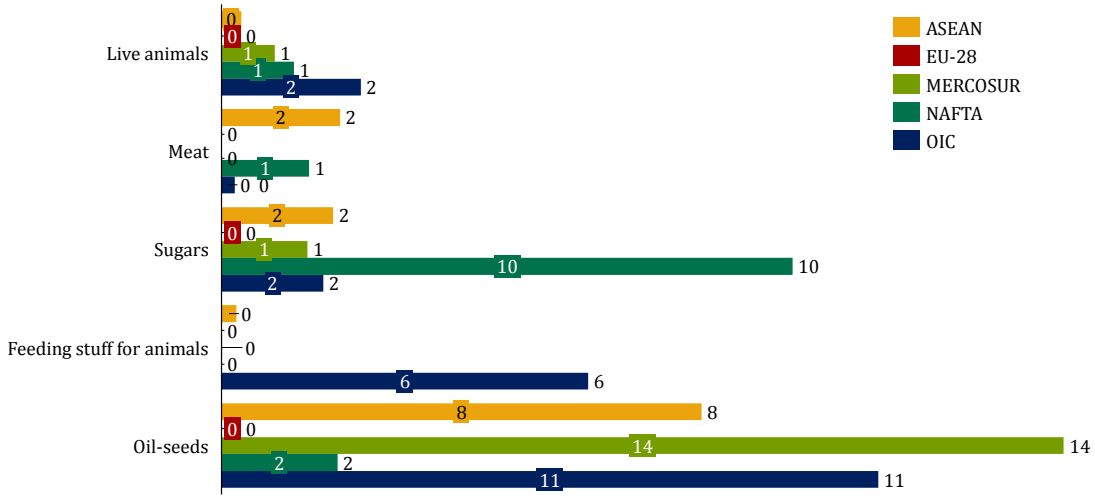
Table 3.8 summarizes the numerical interpretation of Figure 3.13 above. The analysis demonstrates that the share of OIC group in total OIC imports of feeding stuff for animals is lowest (8.1%). The other four products (sugars, meat, oilseeds and live animals) have OIC import shares between 20.7% to 8.8%, all of which are lower than the average agricultural product imports share of the OIC group in general (24.2%). Moreover, the five products have positive and higher than average growth rates in OIC agricultural imports, thus creating a sound potential for promotion of intra-OIC trade. This means that the OIC countries are already importing these products for a variety of reasons since the import growth rates are high. However, still for a variety of reasons, the OIC group countries do not have import of these products from other exporting OIC group countries. There is a need to further explore the

reasons why these products are not widely traded within the OIC group thus demonstrating a need for policy analysis on trade creation and trade diversion for intra-OIC trade.

Country pairs most likely to be successful to promote intra-regional trade at those product divisions are identified through considering the performance of importer and exporter countries for each specific product divisions separately. The shared criteria set is taken as the prerequisite criterion for the importers and exporters. Importers and exporters which met the criteria demonstrated in Tables 3.9 and 3.10 are shortlisted as potential importers and potential exporters as demonstrated in Table 3.11.)

The second part of the analysis presented in Section 3.4.2 is at the product and country levels. In order to explore the product level trade flows and analyze trade policies for each OIC country, five major products with highest shares in the country's agricultural product basket are selected. The focus of the analysis is to compare the weighted average tariff rates imposed by the OIC countries towards a country's exports of the selected products with the weighted average tariff rates imposed by the OIC countries for this country's overall agricultural exports. In this way, which countries are facing higher tariffs within the OIC and how these applied tariffs differ across their top products versus their overall export basket are documented.

Figure 3. 14 Within Blocs' Tariff Rates for Selected Divisions %, 2016



Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.
Note: The weighted average applied tariff rates, ad valorem equivalent.

3.4.1. Policy Analysis at the product division and regional level

The tariff rates of the selected key product divisions as applied by different trade blocks are demonstrated in Figure 3.14. (See Table F.12 in Annex F). The tariff rates of the OIC group for live animals and meat are generally lower than the overall average tariff rates of the five trade blocks. For sugar, feeding stuff for animals, and oil seeds, the intra-OIC tariff rates are higher than the average tariff rates imposed by the five trade blocks. Intra-OIC tariff rates are highest for oil seeds and feeding stuff for animals among all trade blocks, representing large protection for these product divisions in the OIC markets. The protection in oil seed imports in OIC group is particularly higher than the other groups, representing nearly six times higher protection when compared with the average of all five trading blocks. Sugar imports are protected with higher than average tariff rates, in addition to the MERCOSUR and ASEAN groups.

Table 3.11 below presents the potential country matches that fulfill the criteria summarized in Tables 3.9 and 3.10 above. As explained above, the potential importers are the ones with high import growth rates and low intraregional integration in selected product category. The potential importers are ranked according to their import values in the considered product. The potential exporters are the ones with export shares of at least 0.01% of the global export value but have lower than threshold export share to the OIC in the selected product category. The potential exporters are also ranked according to the export values.

Table 3. 11 Potential Matches to Increase Intra-Regional Trade

	Potential importers	Potential exporters	Agreement Coverage
Live animals	Turkey, Indonesia, Libya, Lebanon, Egypt, Jordan, Iraq, Uzbekistan, Pakistan, Azerbaijan, Iran, Kazakhstan, Bangladesh, Brunei Darussalam, Mali, Mozambique, Turkmenistan, Sierra Leone, Maldives, Gambia	Malaysia, Indonesia, Morocco, Burkina Faso	17.72 %
Meat	Saudi Arabia, UAE, Egypt, Malaysia, Indonesia, Gabon, Mozambique, Morocco, Palestine, Maldives, Turkmenistan, Guinea, Mauritania, Sierra Leone, Gambia, Uzbekistan, Mali, Guyana, Niger, Burkina Faso	Indonesia, Kazakhstan	2.56 %
Sugars	Indonesia, UAE, Malaysia, Algeria, Bangladesh, Nigeria, Morocco, Yemen, Somalia, Kazakhstan, Djibouti, Lebanon, Mauritania, Tunisia, Togo, Côte d'Ivoire, Benin, Palestine, Pakistan, Gambia, Mali, Cameroon, Burkina Faso, Sierra Leone, Suriname	Indonesia, Malaysia, Mozambique, Guyana, Uganda, Sudan, Bangladesh, Niger	10.15 %
Feeding stuff for animals	Indonesia, Turkey, Malaysia, Egypt, Saudi Arabia, Iran, Algeria, UAE, Morocco, Bangladesh, Pakistan, Jordan, Palestine, Lebanon, Yemen, Nigeria, Kazakhstan, Azerbaijan, Côte d'Ivoire, Albania, Cameroon, Uganda, Benin, Comoros, Guinea, Sierra Leone	Indonesia, Malaysia, Mauritania, Uganda, Mozambique	4.72 %
Oil-seeds	Indonesia, Pakistan, Iran, Malaysia, Saudi Arabia, Bangladesh, Tunisia, Algeria, Iraq, Palestine, Libya, Guyana, Mozambique, Turkmenistan, Bahrain, Albania, Brunei Darussalam, Niger	Turkey, Niger, Togo, Senegal, Mali, Burkina Faso, Mozambique, Uganda, Somalia, Benin, Bangladesh, Gambia	5.63 %

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The last column of Table 3.11 shows the fraction of all bilateral potential country matches that already have an existing trade agreement in force. For instance, in the case of live animals, there exists a total of 79 bilateral matches and in 19 of these cases two potential exporter and potential importer countries have a trade agreement, corresponding to around 17% coverage. The highest coverage of bilateral trade agreements between potential importer and exporter countries is in live animals. For the other product groups, the bilateral trade agreements between the potential exporters and importers are 10% or lower. Clearly, for these 5 product groups and for a large number of country pairs, the agreement coverage is strikingly low on average. Table 3.11 shows

that bilateral agreements are not common among the potential OIC exporters and importers of selected products (live animals, meat, sugars, feeding stuff for animals and oil-seeds) whose potential for promotion of intra-OIC trade is high.

Table 3. 12 Above Average Tariff Rates for the Potential Matches

	Importer	Exporter	OIC's intraregional tariff rate, %	Bilateral tariff rate, %
Feeding stuff for animals	Egypt	Indonesia	2.33	3.00
	Bangladesh	Indonesia		4.52
	UAE	Indonesia		4.61
	Saudi Arabia	Indonesia		5.00
	Yemen	Indonesia		5.00
	Nigeria	Indonesia		8.96
	Iran	Indonesia		9.50
	Pakistan	Indonesia		11.09
	Turkey	Indonesia		11.50
Live animals	Lebanon	Malaysia	0.22	5.00
	Jordan	Malaysia		5.00
	Turkey	Malaysia		7.80
	Bangladesh	Malaysia		12.39
Oil-seeds	Iran	Turkey	6.14	8.72
	Tunisia	Turkey		35.99
Sugars	Pakistan	Indonesia	10.99	15.34
	Togo	Indonesia		18.45
	Lebanon	Indonesia		19.94
	Bangladesh	Indonesia		22.94
	Morocco	Indonesia		25.00
	Nigeria	Indonesia		28.32
	Algeria	Indonesia		30.00
	Benin	Indonesia		34.64
	Tunisia	Indonesia		36.00

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Observing the fraction of potential country pairs that have a trade agreement is only partially informing. Therefore, the tariff rates across potential matches for each product division are compared against the average OIC intra-regional tariff rates. As demonstrated above, live animals and meat have the lowest tariff protection. In consequence with such argument, meat is not included in Table 3.12 since the bilateral tariff rates for meat is already below the OIC intraregional tariff rates. There is thus a conceivable potential to enhance the OIC intra-regional

trade of meat across potential trade partners. For live animals, only four potential importers (Lebanon, Jordan, Turkey and Bangladesh) apply higher than average intra-OIC tariff rates for the exports coming from Malaysia.

Other potential importing countries for live animals listed in Table 3.11 have lower than average OIC tariffs against exports originating from exporting countries (Malaysia, Indonesia, Morocco, Burkina Faso), thus creating a ground for potential preferential trade agreements, towards zero tariff protection.

For oil seed exports, Turkey is faced with higher than average tariff rates from Iran and Tunisia. For sugar exports, Indonesia faces higher than average tariff rates imposed by many importing OIC countries as demonstrated in Table 3.12. The highest protection levels among all product divisions are observed for sugar and oil seeds. The intra-OIC tariff rates against imports of oil seeds are already high; yet bilateral tariff rates against exports originating from Turkey are higher even more in two imposing countries, Iran and Tunisia. For sugar imports, the intra-OIC tariff rates are highest among the five selected product divisions. Sugar imports originating from Indonesia are protected with higher than average intra-OIC tariffs in nine of the importing countries.

Indonesia, Malaysia, and Turkey are not only the countries that are identified as potential exporters of these potential products; in COMCEC (2013b), these countries are also emphasized as countries that exhibit greatest potential as major agricultural FDI destinations within the OIC. Overall, these three top exporting countries in five product divisions are faced with high tariff protection from many of the potential importers. The tariff rates are quite high when compared to the average tariff rates applied in OIC intra-regional trade. Although more analysis is needed to explore welfare effects of trade diversion, there is a room for lowering of tariffs against the products coming from the top exporters. Such trade diversion has a prospect to enhance intra-OIC trade in creating new trade possibilities across the OIC countries.

As underlined above, the analysis of NTMs is subject to data availability limitations. Specifically, the NTM prevalence over products and the fraction of trade in value terms that is affected by the NTMs are not available for all countries, all products and all NTM types. The WITS database on NTMs does not cover the NTM related data of Comoros, Djibouti, Egypt, Iraq, Jordan, Somalia, Sudan, Syria and Yemen from the Arab group, of Albania, Azerbaijan, Bangladesh, Iran, Kazakhstan, Kyrgyz Republic, Turkmenistan and Uzbekistan from the Asian group, and Chad, Gabon, Guinea, Guinea-Bissau, Mali, Mozambique, Sierra Leone, Togo and Uganda from the African group. The available data for the most recent year and for other OIC countries and some other country groups such as EU and ASEAN are presented in Tables F.13, F.14, and F.15 in Annex F.[11] More specifically, these tables cover the technical measures, i.e., SPS measures under the classification "A", TBT measures under the classification "B" and pre-shipment inspection and other formalities under the classification "C", as the data on non-technical measures is missing for a larger number of countries. Besides, only a single statistic, the coverage ratio (CR), is presented in these tables, and the CR for a given country, a given product group, and a given NTM type indicates the percentage of total import value that is subjected to the NTM regulation. For instance, a CR of 92.38% for "Animals" associated with SPS measures in Kuwait indicates that 92.38% of the total import value for this aggregated HS group is transacted under SPS regulations.

[11] The NTM Map data that provides NTM data for a large set of countries and five different NTMs (including SPS and TBT measures) covers only the 2010-2012 period.

In terms of SPS measures collected in Table F.13, "Animals" and "Vegetables" have considerably higher CRs than "Food Products", "Hides and Skins" and "Wood" as expected. In fact, in many of the OIC and non-OIC countries, "Animals" and "Vegetables" imports are fully subject to SPS regulations. Compared with EU that has average CRs over 99% for "Animals" and "Vegetables," only the Arab group have high averages closer to the EU levels. The table also shows that the Arab group countries, on average, have higher CRs for "Food Products" as well. Regarding the TBT measures presented in Table F.14, there exists a considerably larger variation in all five product groups and both for the OIC and non-OIC countries. In some countries and some product groups, CR is less than 1% whereas in some others the entire import value is subject to TBTs. Compared with the EU that records CRs of over 99% for "Animals", "Vegetables", "Food Products" and "Hide and Skins" each and a CR of over 80% for "Wood", the OIC figures remain much lower with certain country-product exceptions. Missing data is much common in the case of CRs associated with pre-shipment inspection and other formalities (Table F.15). There is again a sizable degree of variation across countries and product groups. The OIC countries have, on average, larger levels of CR compared to the EU average.

It remains a difficult task to draw a definite policy conclusion out of this overview of NTM data given the limited coverage of product and country groups. However, since "Live animals" and "Meat" stand out as product divisions that may serve a potential to promote intra-OIC trade and that currently have lower degrees of tariff protection within the OIC, the analysis of existing NTMs for "Animals" is a crucial aspect of promoting intra-OIC agricultural trade. Standardization issues and Halal certification enter the picture from this angle; a unified system of standards and Halal certification principles accepted and exercised by all of the OIC member countries would directly contribute to the elimination of NTM-related barriers that are adversely affecting the intra-OIC trade flows in "Live animals" and "Meat."

The notion of establishing common standards among the Islamic countries dates back to mid-1980s, while the Standards and Metrology Institute for Islamic Countries (SMIIC) has initiated its activities in 2011. The main objective of SMIIC is to establish harmonized standards for expedited exchange of goods and services among the OIC member countries by eliminating technical barriers to trade in broad sense. As underlined by COMCEC (2018b), SMIIC is the only global body working for the establishment of common standards and accreditation frameworks among Islamic countries. The Standardization Management Council (SMC) is the main organ of the SMIIC that has been assigned with the task of development of OIC/SMIIC standards. SMC governs the activities of 15 technical committees specialized on Halal food, Halal cosmetic, energy efficiency and renewable energy, tourism, transportation, leather, jewelry, etc. The 6th technical committee (TC6) specializes on agricultural products covering "agricultural, horticultural, and dairy products, food products of livestock, the products of poultry and bee raising, the edible products of forestry." (SMIIC, 2018). Of 57 OIC member countries, 37 countries are also participant countries of the SMIIC[12] where Bosnia and Herzegovina, Thailand and the Turkish Cypriot State are observer states.

COMCEC's (2016) analysis on the compliance of the OIC member states to international standards indicates that the OIC countries have varying degrees of compliance to harmonized international standards such as those of ISO, IEC and the Codex. The low degree of participation in these international standardization bodies is a challenge faced by many OIC member

[12] These are Afghanistan, Algeria, Azerbaijan, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Djibouti, Egypt, Gabon, Gambia, Guinea, Iran, Iraq, Jordan, Kazakhstan, Kyrgyz Republic, Lebanon, Libya, Malaysia, Mali, Mauritania, Morocco, Niger, Pakistan, Palestine, Qatar, Saudi Arabia, Senegal, Somalia, Sudan, Suriname, Tunisia, Turkey, Uganda, UAE, and Uzbekistan.

countries but membership alone is not sufficient to ensure compliance since active involvement in technical committees of these bodies is necessary.

COMCEC's (2016) further analysis of three regional initiatives with respect to international standards (APEC, ASEAN, and EAC) shows that the approach taken by the APEC as a guidance is the most suitable for the OIC since APEC's approach is a consensus-based model of collective targets but it does not use legally binding instruments.

In the case of the Halal foods and beverages, there have already been some accomplished tasks by the SMIIC such as

- General Guidelines on Halal Food (OIC/SMIIC 1:2011)
- Guidelines for Bodies Providing Halal Certification (OIC/SMIIC 2:2011)
- Guidelines for the Halal Accreditation Body Accrediting Halal Certification Bodies (OIC/SMIIC 3:2011)

and two new TCs have been established in 2016 for "Halal Supply Chain" and "Halal Management Systems." Despite these developments, the process of Halal certification within the OIC has been far from being completed. Some SMIIC member countries have only recently established their national accreditation agencies that should comply with SMIIC's guidelines. These SMIIC guidelines are to be developed through the Islamic jurisprudence, but the issue of Halal accreditation goes beyond the religious dimension as it also carries great potential to eliminate technical barriers on intra-OIC trade in certain agricultural products. In this respect, the currently growing interest and awareness among the OIC countries in the field of Halal certification is an important strength but this strength should be put into a broader perspective of establishing a unique Halal certification in a timely manner. In fact, one strong target would be to establish this unique Halal certification as a common certification that represents a larger set of hygiene and environmental safety standards in all OIC markets just as in the case of CE marking of the European Economic Area.

3.4.2. Policy analysis at the product and country levels

Table F.12 in Annex F presents the top 5 export products of the 57 OIC countries. The table shows (i) the percentage share of the top export products in world exports of the product, (ii) the share of the OIC as destination for the export of the product, and (iii) weighted average tariff rates implemented for the product by the OIC countries against weighted average OIC tariff rates for imports originating from the country.

The blue shaded cells in the table demonstrate that the country's share in total world exports of the product is higher than the country's share in total world agricultural product exports (products with prime significance for the country's agricultural trade through exports). Overall, for their top three export products, all countries except for the exports originating from Sierra Leone have higher export shares in total world export of the product than the country's overall export share in total world agricultural exports. The situation is quite similar for the top 5 export products, only with the exception of Chad, Comoros, Gabon, Guinea-Bissau and Sierra Leone for which the share of their top products are lower than country's share in world agricultural exports. The top five export products of the OIC countries are thus significant agricultural export products with relative importance when compared with overall exports of agricultural products.

Although the five products are significant agricultural export products of strategic importance, the share of the OIC as export destination is quite low. The pink shaded cells denote the products for which the share of OIC as destination for the product has a larger percentage than the share

of OIC as destination for the country's overall agricultural exports. Table F.12 demonstrates that the share of the OIC countries as export destination for the top three export products is generally lower than the share of OIC countries as export destination of the agricultural products except for exports originating from Bahrain, Kazakhstan, Kuwait, Oman, Qatar, S. Arabia, Senegal and Somalia, an indication that OIC is not a major export market of the top export products for most of the OIC countries.

Table 3. 13 OIC Countries with High Export Shares but Facing High Tariff Rates in OIC

Country	Products for which OIC has a large share in the country's agricultural imports but the tariffs implemented by the OIC countries are high
Afghanistan	Grapes, fresh
	Apples, fresh
Albania	Spices (excl. pepper/pimento/headings 075.21 - 075.28); mixtures of two/more of the products of different headings of group 075
Algeria	Other beet/cane sugar in solid form, other than flavoured/coloured matter
Azerbaijan	Other beet/cane sugar in solid form, other than flavoured/coloured matter
Brunei Darussalam	Pineapple juice
Cameroon	Wood of non-coniferous species specified in heading 247.5, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm
Chad	Sesame (Sesamum) seeds
Comoros	Spices (excl. pepper/pimento/headings 075.21 - 075.28); mixtures of two/more of the products of different headings of group 075
Gabon	Woods in the rough/roughly squared, n.e.s.
Gambia	Milk & cream, not concentrated/sweetened, of a fat content, by weight, exceeding 1% but not > 6%
	Linseed oil, refined, & its fractions
	Other sauces & preparations therefor; mixed condiments & mixed seasonings
Palestine	Dates, fresh/dried
Guyana	Fruits/edible parts of plants, prepared/preserved, n.e.s.
	Live animals, n.e.s.
Indonesia	Palm oil, refined, & its fractions
Iran	Grapes, dried (e.g., raisins)
Kazakhstan	Other wheat (including spelt) & meslin, unmilled
Kyrgyzstan	Beans, other than broad beans & horse beans, dried, shelled, whether/not skinned/split
Lebanon	Other beet/cane sugar in solid form, other than flavoured/coloured matter
Malaysia	Palm oil, refined, & its fractions
	Vegetable fats & oils & their fractions, partly/wholly hydrogenate
Mauritania	Salmonidae, frozen (excluding livers & roes)

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculation Note: The share of OIC as destination for the country's export of the product is greater than the share of OIC as destination for the country's agricultural exports AND the weighted average tariff rates implemented by OIC members to the country's export of the product is greater than the weighted average tariff rates implemented by OIC members to the country's agricultural exports

The reason that the OIC market is not a preferred export destination for most of the OIC countries is partially due to high tariff protection of the OIC member countries, particularly for the agricultural exports. For instance, among the 57 OIC countries, only Bahrain, Iraq, Kuwait, Libya, Maldives, Qatar, Uzbekistan and Yemen are imposed by lower weighted average tariff rates for their top 5 agricultural export products, thus facing with low protection against their exports in the OIC market. All other countries have at least one top export product with tariff rates implemented by the OIC countries that are higher than the average intra-OIC agricultural tariff rates imposed to the country. The highest tariff rates in intra-OIC agricultural trade is for

"tobacco" exports originating from Bangladesh (67%), "cigarettes containing tobacco" exports originating from Turkey (65.2%) and "other fish prepared whole in pieces but not minced" exports originating from Albania (58.6%). Table 3.13 is produced using the data from Table F.12 in Annex F in order to demonstrate products and countries whose export shares to the OIC market is higher than average yet is faced with high tariff rates from the OIC countries. As seen in the table, 19 OIC countries out of a total of 57 countries are faced with high tariffs by their export OIC markets (as compared to the average tariff imposed to them by the OIC countries for their agricultural exports). The table indicates most countries' top export products are potential candidates to be promoted in further development of intra-OIC agricultural trade.

As demonstrated above in Section 3.4.1, "sugar" and "oil seed" exports are facing high intra-OIC protection rates. The analysis at the product and country level makes it possible to further explore the product divisions at the product level. For sugar, the highest protection is for "other beet/cane sugar in solid form, other than flavoured/coloured matter" that are imposed to the exports originating from Algeria, Azerbaijan, Lebanon and Saudi Arabia where intra-OIC tariff rates are higher than the tariff rates for agricultural products in general. The shares of the OIC as a destination for "other beet/cane sugar in solid form, other than flavoured/coloured matter" exports originating from Algeria, Azerbaijan, Lebanon and Saudi Arabia are 68.4%, 94.9%, 99.5% and 80.3%, respectively, indicating a high potential for welfare improvement with lower import tariff rates within the OIC market.

For oil seed exports, "sesame seeds" originating from Chad, Mali, Nigeria, Somalia, Togo, Burkina Faso and Guinea-Bissau are facing higher than average intra-OIC tariffs. The share of the OIC as a destination of "sesame seeds" exports is highest for Chad (99.1%) followed by Guinea-Bissau (56.2%), Nigeria (55%), Togo (46.3%), Burkina Faso (23%) and Somalia (16.35). The share of OIC is lowest for "sesame seed" exports of Mali (0.3%). Another oil seed product facing high tariff protection within the OIC market is "linseed oil" exports originating from Gambia where the share of the OIC as a destination is 100%.

Table 3.14 is produced by using the data from Table F.12 in Annex F in order to demonstrate the situation regarding the 5 potential product divisions as identified above with high growth rate in OIC imports and low level of intra-regional integration (see, explanations around Figure 3.13 above). Among the selected potential product divisions (sugars, meat, feeding stuff for animals, oilseeds, live animals), the high tariff rates are largely against exports of sugars and oilseeds, particularly for "other beet/cane sugar in solid form, other than flavoured/coloured matter" originating from Algeria, Azerbaijan, Lebanon, Saudi Arabia, Senegal and "Sesame (Sesamum) seeds" originating from Chad, Mali, Nigeria, Guinea Bissau, Somalia, Sudan, Togo and Burkina Faso. Considering that sugars and oilseeds are product divisions with high potential for promoting intra-OIC trade, extra emphasis should be given for the agricultural trade policies for the countries listed in Table 3.14 since these products are primary export products of these countries yet they are faced with high tariff rates in the OIC markets.

The mean value of intra-OIC tariff rate differences for the products with higher than average protection is 14.1% with a standard deviation of 13.3%. In other words, the difference between "the weighted average tariff rates implemented by OIC members to a country's export of the top products" and "the weighted average tariff rates implemented by OIC members to the country's agricultural exports" has an average value of 14.1%. The OIC share for these "higher than average protection" products as an export destination is 41.3% with a standard deviation of 35.5%. (see Table F.12 in Annex F).

3.5. Survey Results

This subsection is devoted to the analysis of the summary findings of the online survey. As explained in Chapter 1, the main purpose of this survey is to obtain qualitative data on stakeholders' perceptions for an improved agricultural trade and policy capacity in OIC member countries.

The summary analysis presented below builds upon on the completed responses of N = 46 participants, after the partial responses of 15 participants have been disregarded as they are severely incomplete.

The 46 survey participants are dispersed over 21 OIC member countries, being composed of 3 countries (and 3 participants) from the African group, 10 countries (and 27 participants) from the Arab group, and 8 countries (and 16 participants) from the Asian group. Around 40% of these participants are working at relevant ministries in their countries, around 13% of them are working at other government institutions, and around 9% of them are working at international organizations and NGOs. A totality of around 35% of participants are working at chambers, farmers' associations and other private sector units, and universities.

Table 3. 14 Country and Product Level Analysis of Top 5 Potential Product Divisions

Exporter	Product	Share of the product in the exporter's total agr. exports, %	Share of the country in the total world export of the product, %	Share of OIC as destination for the country's export of the product, %	Weighted average tariff rates implemented by OIC members to the country's export of the product, %
	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
Algeria	Other beet/cane sugar in solid form, other than flavoured/coloured matter	65,6	1,9	68,4	24,1
Azerbaijan	Other beet/cane sugar in solid form, other than flavoured/coloured matter	11,8	0,4	94,9	12,5
Bahrain	Other beet/cane sugar in solid form, other than flavoured/coloured matter	14,7	0,5	99,9	0,1
Chad	Sesame (Sesamum) seeds	42,7	1,0	99,1	12,4
	Groundnuts (peanuts), not roasted/othw. cooked, shelled	0,7	0,0	100,0	7,5
Benin	Cotton seeds	1,7	3,1	25,2	-
Djibouti	Bovine animals, live, other than pure-bred breeding stock	1,9	0,0	100,0	-
Gabon	Bran, sharps & other residues, of wheat	0,7	0,2	100,0	2,5
Guyana	Cane sugar, raw, in solid form, not containing added flavouring/colouring matter	13,8	0,5	4,1	-
	Live animals, n.e.s.	0,3	0,2	9,7	3,6
Kazakhstan	Linseed	4,8	12,8	26,7	2,6
Jordan	Sheep, live	10,8	11,0	92,7	-

Exporter	Product	Share of the product in the exporter's total agr. exports, %	Share of the country in the total world export of the product, %	Share of OIC as destination for the country's export of the product, %	Weighted average tariff rates implemented by OIC members to the country's export of the product, %
Lebanon	Other beet/cane sugar in solid form, other than flavoured/coloured matter	7,0	0,4	99,5	10,6
Mali	Sheep, live	21,7	10,8	99,1	-
	Pure-bred bovine breeding animals, live	17,8	8,5	99,8	-
	Sesame (Sesamum) seeds	13,9	3,0	0,3	5,6
Mauritania	Flours, meals & pellets, of fish/of crustaceans, molluscs/other aquatic invertebrates, unfit for human consumption	11,8	2,7	15,8	3,8
Mozambique	Sesame (Sesamum) seeds	4,3	2,0	2,8	9,3
Niger	Sesame (Sesamum) seeds	25,2	4,9	0,0	-
Nigeria	Sesame (Sesamum) seeds	12,9	9,9	55,0	11,8
Pakistan	Meat of bovine animals, fresh/chilled, with bone in	3,6	2,6	100,0	-
Guinea-Bissau	Sesame (Sesamum) seeds	1,0	0,1	56,2	12,5
Qatar	Live animals, n.e.s.	17,1	0,7	99,8	-
Saudi Arabia	Other beet/cane sugar in solid form, other than flavoured/coloured matter	5,3	1,3	80,3	7,0
Senegal	Groundnuts (peanuts), not roasted/othw. cooked, shelled	5,1	2,6	4,2	19,2
Sierra Leone	Bovine animals, live, other than pure-bred breeding stock	0,2	0,0	100,0	-
Somalia	Goats, live	28,5	30,9	100,0	-
	Bovine animals, live, other than pure-bred breeding stock	19,6	0,7	100,0	-
	Sheep, live	18,5	3,9	100,0	-
	Sesame (Sesamum) seeds	11,3	1,1	16,3	6,2
Sudan	Sesame (Sesamum) seeds	39,6	11,6	46,3	3,0
	Lucerne (alfalfa) meal & pellets	6,1	14,5	100,0	-
	Swedes, mangolds, fodder roots, hay, clover, sainfoin, forage kale, lupines, vetches & similar forage products, whether/not in the form of pellets	3,8	1,3	100,0	-
Togo	Sesame (Sesamum) seeds	23,4	3,7	2,5	12,4
UAE	Other beet/cane sugar in solid form, other than flavoured/coloured matter	7,3	4,8	71,4	12,0
Tunisia	Other beet/cane sugar in solid form, other than flavoured/coloured matter	3,2	0,3	82,4	2,2
Uganda	Other beet/cane sugar in solid form, other than flavoured/coloured matter	4,1	0,4	0,0	2,0

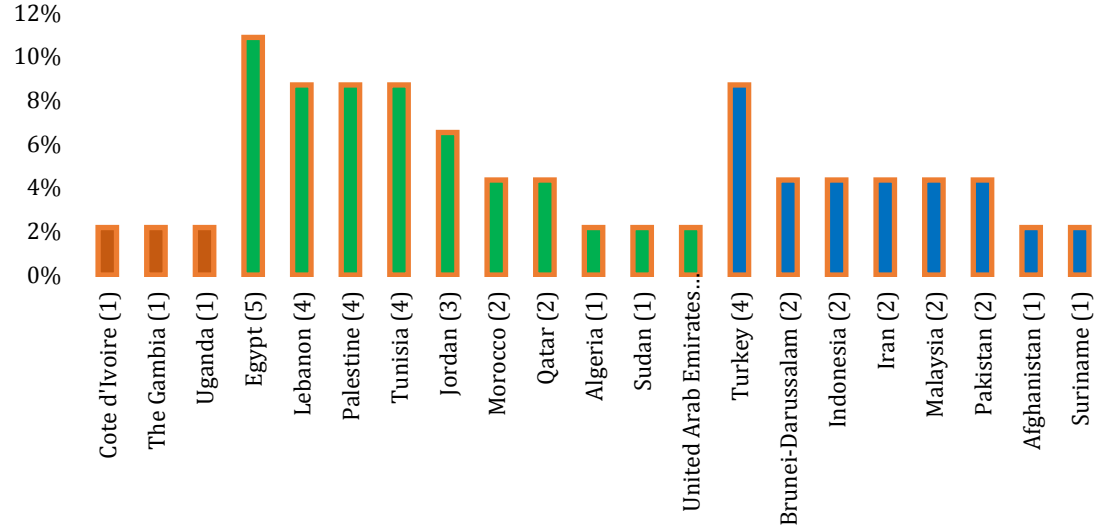
Exporter	Product	Share of the product in the exporter's total agr. exports, %	Share of the country in the total world export of the product, %	Share of OIC as destination for the country's export of the product, %	Weighted average tariff rates implemented by OIC members to the country's export of the product, %
Burkina Faso	Sesame (Sesamum) seeds	4,2	1,4	23,0	1,4
	Oil-seeds & oleaginous fruits, n.e.s.	3,3	1,8	2,3	0,0

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations.

Note: This table collects information on the global and OIC market shares of countries' top export products at the product level and weighted average tariff rates these products face at the OIC markets. Each column is colored according to the thresholds indicated at the first row. To take just one example, "Other beet/cane sugar in solid form, other than flavoured/coloured matter" from Algeria has a large share within Algeria's agricultural exports (larger than 10%) as indicated in the colored third column. This product is important, and hence the fourth column is colored, also because 0.9% of Algerian share in "Other beet/cane sugar in solid form, other than flavoured/coloured matter" is larger than the overall Algerian share in agricultural products. Furthermore, the share 98.7% of OIC markets for Algerian "Other beet/cane sugar in solid form, other than flavoured/coloured matter" is larger than the overall OIC share of agricultural products from Algeria, and the fifth column is also colored. Finally, the last column is colored for in "Other beet/cane sugar in solid form, other than flavoured/coloured matter" because the weighted average applied tariff rates faced by this product by Algerian exporters in OIC markets is larger than the corresponding rates applied to overall agricultural exports from Algeria in OIC markets.

A vast majority of participants states that agricultural trade is either very important (67%) or important (21%) to the country's overall agricultural development. Similar figures are observed with regards to the role of agricultural trade on food security (72% and 22%, respectively). This is expected given the large share of the agricultural sector in employment and GDP in OIC member countries generally. But it also indicates that the design and implementation of sound agricultural trade policies would result in significant positive effects on the social and economic welfare in the OIC member countries.

Figure 3. 15 Distribution of Survey Participants across Countries



Source: Authors.

Table 3. 15 Factors Limiting Agr. Trade's Contribution to Development & Food Security

Statement	Response Rate
Low farmer prices	73.9%
Stringent technical measures	60.9%
High tariffs	50.0%
No diversified export markets	41.3%
No diversified export products	28.3%
High taxes and charges	21.7%
No diversified import markets.	10.9%
Others (specified by the participant)	8.7%
Bureaucratic hurdles	
The lack of global agricultural policy	
Transport and trade facilitation procedures	
No diversified import products	4.4%

Source: Authors' calculations

The messages originating from two critical multiple-response questions are summarized in Tables 3.15 and 3.16. These are critical (i) in shedding light on which factors adversely affect the role of agricultural trade on overall economic development of the country and on the status of food security and (ii) in identifying which factors affect agricultural trade flows of the country.

Around 57% of participants indicate that there are (agricultural) commodity or marketing boards in their countries, and around 74% of participants believe that these commodity boards are and will be important for facilitating foreign trade in these products.

Table 3. 16 Factors Affecting Agricultural Trade Flows

Status	Very poor	Below average	Average	Above average	Excellent
Marketing knowledge and information	13.0%	21.7%	52.2%	13.0%	0.0%
Human resources	2.2%	21.7%	41.3%	28.3%	6.5%
Financial resources	10.9%	30.4%	41.3%	17.4%	0.0%
Quality of the products	0.0%	13.0%	47.8%	32.6%	6.5%
Standardization of the products	4.4%	32.6%	39.1%	19.6%	4.4%
Technical adaptability of the producers	10.9%	15.2%	52.2%	17.4%	4.4%

Source: Authors' calculations

The reasons that are stated regarding the role of marketing boards mainly revolve around the boards' contribution to trade facilitation by

- specializing on one particular product that has its own opportunities and challenges,
- promoting the product in international markets,
- ensuring that higher quality products are served through provided market information and packaging services to producers, and
- leading to better long-term planning and to the use of more productive techniques.

It is indicated by around 61% of participants that there are state-owned enterprises (SOEs) in their countries. A majority of the participants (roughly 59% of them) state that SOEs are and will be contributing to trade facilitation. Contrary to the case of marketing boards, a larger fraction of participants states a set of concerns and reservations about the effectiveness of SOEs.

For instance, poor management of SOEs is indicated as a major weakness by several participants from different countries. Besides, the domestic orientation of SOEs is identified as a reason that limit their trade facilitation function. Governments' regulatory role is stressed as the main complementarity mechanism with the private sector that would ensure highest efficiency levels in various stages of the supply chain.

Table 3. 17 Regions with which Agricultural Trade is Expected to Increase

Region	Response Rate
Middle East	73.91%
Asia	47.83%
Africa	45.65%
Western Europe	41.30%
Central and Eastern Europe, the Baltic States and the CIS (transition economies)	34.78%
Latin America	8.70%
North America	4.35%

Source: Authors' calculations

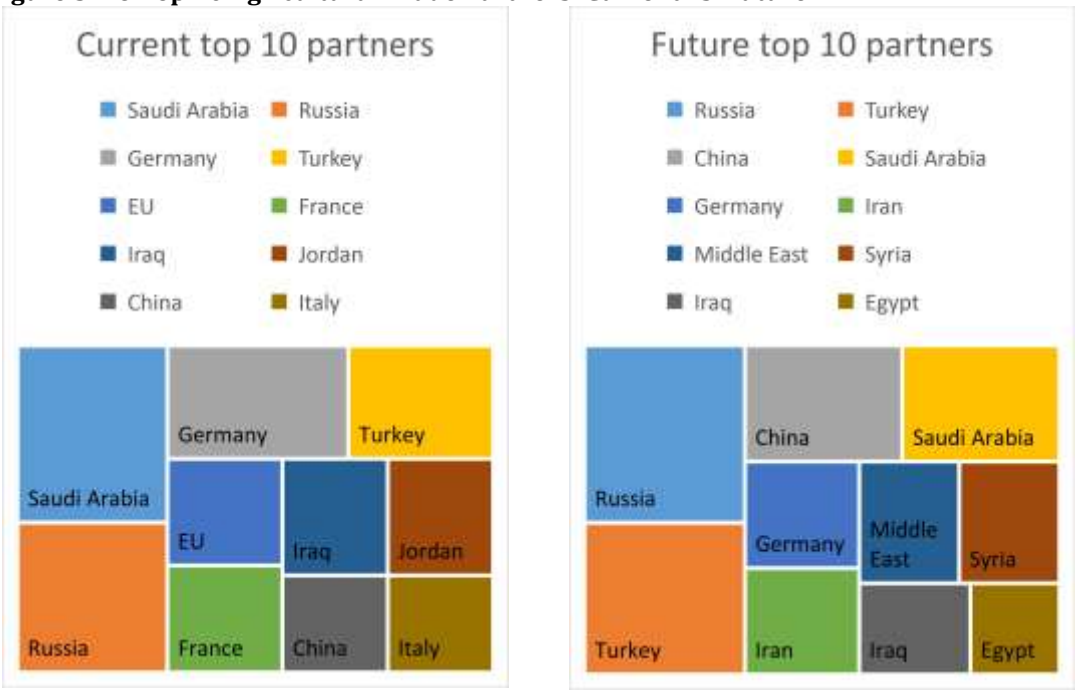
Over 80% of participants indicate that the agricultural cooperatives in their countries are and will be key market institutions that contribute to trade facilitation. The cooperatives from the participants' countries are dispersed over a large spectrum of products including those classified within fish products, animals, fruits and vegetables, and dairy products. Cooperatives are seen as key institutions for a variety of reasons. A relatively large number of responses are focused on different stages of supply chains, especially underlining that large cooperatives help reduce information and credit barriers for smallholder farmers and prevent exploitative practices exercised by middlemen.

Improvements in NTM arrangements such as standardization and accreditation schemes, bilateral and multilateral trade agreements, infrastructure investments that would yield improvements in logistic performance, increasing FDI flows, and product diversification are seen as the foremost means through which further trade facilitation can be realized with current trade partners.

The survey also includes questions that are designed to shed light on the trade networks within OIC. Clearly, responses to these questions would be dependent on the list and groups of countries which the survey participants are from. Among the regions with which agricultural trade is expected to be strong in the next 5 years, the Middle East stands out as the top region, receiving around 74% of responses. The Middle East is then followed by Asia (around 48%) and Africa (around 46%). Neither the North America nor the South America exhibits a strong potential in this regard.

The treemaps in Figure 3.16 indicate that there is an expectation of agricultural trade relationships exhibiting some degree of persistence both with the OIC partners and with the non-OIC partners. As stressed in other parts of this report, Saudi Arabia and Turkey are agricultural import and export hubs within the OIC, respectively. These countries are accompanied by non-OIC partners Russia, Germany and China both for the current and for the future agricultural trade relationships.

Figure 3. 16 Top 10 Agricultural Trade Partners: Current vs. Future



Source: Authors' calculations

One multiple-response question in the survey is designed to investigate the likelihood of trade agreements across the OIC, asking which particular country or countries out of 56 other member countries are expected to sign a bilateral trade agreement with the participant's country. Once ranked from the top to the bottom share of responses, Saudi Arabia, Turkey, Qatar, Kuwait, and Iran are ranked as the five most likely countries with which the OIC countries would sign a bilateral trade agreement in the future. At the bottom of this list are ranked Albania, Brunei-Darussalam, Guyana, Maldives, and Suriname.

3.6. Conclusions and Lessons Learned

Multiple membership to different regional trade agreements result in overlapping trade rules, a phenomenon called by Jagdish Baghwati as the "spaghetti bowl" phenomenon (Bhagwati, 1995), especially in Africa. This has the effect of creating discriminating high tariffs applied by OIC member countries to others which are excluded from the existing regional trade agreements with non-OIC countries.

While the OIC is a net exporter in some products and a net importer in other agricultural products, the overall balance of agricultural trade records a trade deficit for the OIC as a whole. The Asian group is the largest exporter of agricultural products in the OIC. The Asian group is the largest importer of agri-raw materials while the Arab group is the largest importer of agri-food products and fish products. The African group's share in exports and imports is smallest among the OIC country groups.

Over the last decade, the share of the non-OIC countries in exports and imports of agricultural products decreased slightly in favor of the OIC group countries, particularly for the African and the Arab group countries. There is an increasing trend of agricultural trade within the groups, pointing to an unexploited trade potential.

The intra-group trade within the Arab group shows an increasing trend, i.e. trade diversion from the non-OIC group to the Arab group countries, reflecting possible impacts of Pan-Arab trade agreement.
The share of the OIC as an export destination for the OIC member countries is quite low. The reason that OIC is not a preferred export destination for most of the OIC countries is mainly due to high tariff protection, particularly for the agricultural exports originating from OIC countries which do not benefit from the existing regional trade agreements with non-OIC countries.

The Arab group applies lowest tariff protection on imports of agri-food products and fish originating from the OIC countries. The Asian group applies lowest tariff protection on imports of agricultural raw materials originating from the OIC countries. The countries usually favor utilization of producer oriented and consumer oriented policies on agricultural trade rather than trade oriented policies.

There are five major product groups with a potential for intra-OIC trade promotion: sugar, oil seeds, feeding stuff for animals, live animals and meat.

Among the potential product groups for intra-OIC agricultural trade promotion, exports of "sugar", "oil seeds" and "feeding stuff for animals" are facing highest intra-OIC tariff protection as determined by weighted average applied tariff rates. The lowest tariff protection for the promotion of intra-OIC trade in potential product divisions is observed at "live animals" and "meat." The tariff rates for meat are lowest among the potential country matches. Bilateral tariff rates for meat are much lower than the intra-regional tariff rates within the OIC, thus offering a potential for trade promotion across OIC trade partners through appropriate trade policy tools.

Among potential country matches for promotion of OIC trade for the potential product groups identified above, bilateral trade coverage is quite low, pointing out need for efforts to overcome this and promote trade among OIC member states.

The share of OIC countries as export destination for their top three export products is generally lower than the share of OIC countries as export destination of their overall agricultural exports except for exports originating from Bahrain, Kazakhstan, Kuwait, Oman, Qatar, S. Arabia, Senegal and Somalia, an indication that OIC is not a major export market of the top export products of most of the OIC countries.
The reason that the OIC market is not a preferred export destination for most of the OIC countries is due to high tariff protection of the OIC member countries, particularly for agricultural exports. Among the 57 OIC countries, only Bahrain, Iraq, Kuwait, Libya, Maldives, Qatar, Uzbekistan and Yemen are imposed by lower than average weighted average tariff rates for their top 5 agricultural export products.

Due to the trade diverting effect of the regional trade agreements, some products exported by OIC member states are negatively discriminated; i.e. "tobacco" exports originating from Bangladesh, "cigarettes containing tobacco" exports originating from Turkey and "other fish prepared whole in pieces but not minced" exports originating from Albania are subjected to the highest tariff rates in intra-OIC agricultural trade.

The review and analysis of agricultural trade flows and policies presented in this report reveal that most recent data are not available in certain cases, partially confirming COMCEC's (2014)

previous research outputs on the quality and availability of agricultural statistics in the OIC. Even though the OIC has a subsidiary organ (SESRIC) that collects and disseminates several types of economic and social statistics including those related to agriculture and trade, the trade policy measures for recent years and for numerous countries are not easily accessed through international databases. The situation is especially worrisome for NTMs and for most countries from the African group. The main weaknesses regarding agricultural statistics capacity in the OIC have been identified as "poor organization, lack of resources and scope of statistics" by COMCEC (2014: 144), and it is of prime significance for future researches to collect and disseminate the most recent agricultural trade policy statistics.

In the case of NTMs, drawing strong conclusions about whether these generally act as barriers against intra-OIC agricultural trade is somewhat difficult because of these severe data limitations. However, since "Live animals" and "Meat" are the potential product divisions that currently face lower tariff protection in the OIC markets, a systematic reconfiguration of NTMs (especially the SPS measures) for these product categories may greatly contribute to the promotion of intra-OIC trade in these product divisions.

Centrally related with the SPS measures (and with other NTMs that may be acting as barriers for potential product divisions and products) are the issues of standardization, certification, and accreditation. More specifically, Halal certification for which some prior effort has been put forward by the SMIIC is a critical dimension of agricultural trade policy for the OIC. In recent years, SMIIC has compiled three sets of guidelines that establish the OIC standards for (i) Halal product producers, (ii) agencies that grant Halal certifications to producers, and (iii) accreditation bodies that accreditate certification agencies, respectively. It should also be noted that there is increased awareness and interest in Halal certification among the OIC member countries.

Survey results reflect the views of 46 specialists from 21 OIC countries working at relevant ministries, government units, universities, NGOs, and the private sector. Agricultural trade and food security are seen as very important by a large majority of these respondents. Three factors are emphasized more by the survey participants as among the ones adversely affecting agricultural trade flows. These are the very poor status of marketing knowledge and information, the very poor status of financial resources, and the very poor status of technical adaptability of producers. The standardization of the products is also seen as a problem area. Both the marketing boards and the SOEs are expected to play major roles in trade facilitation in the future by the participants from the countries that currently have these types of institutions. In the case of agricultural cooperatives, their role in easing the producers' access to information and finance is emphasized by a vast majority of participants.

Survey participants' views reaffirm the existing agricultural trade networks within the OIC (e.g., Turkey's and Saudi Arabia's roles as export and import hubs, respectively) and the existing agricultural trade relationships with major non-OIC partners such Russia, EU, and China. Furthermore, these current relationships are expected to be strong in the near future.

Chapter 4: In-depth Assessment of Agricultural Trade Policies in Selected OIC & non-OIC Countries

4.1. Turkey

Turkey is an upper middle income country with a GDP of 850.7 billion USD and 10,592 USD per capita income in 2017 (World Bank, 2018). Turkey ranks 14th in GDP (PPP) and ranks 18th in real growth rate among a total of 230 countries (CIA, 2018). The average rate of economic growth in Turkey between 2010 and 2016 has been 6.5%. In 2016, Turkey's economic growth rate has been 2.9%, inflation rate has been 8.5% and unemployment rate has been 10.9% (Eğilmez, 2018). The slowdown in economic growth is due to Turkey's vulnerability to capital inflows and contraction in agricultural output, partly because of adverse weather conditions (WTO, 2016).

Turkey has a robust agricultural sector with a 19.6% employment share of the country's working population in 2016. Agricultural sector accounts for 6.2% of the country's GDP with a value of 53.4 billion USD. A world leader in the production of dried figs, hazelnuts, sultanas, raisins and dried apricots, Turkey is ranked 7th in agricultural production. The country is one of the leading exporters of agricultural products in the Eastern Europe, Middle East, North Africa (EMENA) region. Globally, Turkey exported 1,781 kinds of agricultural products to more than 190 countries in 2016. In 2016, Turkey is the largest country in Europe in terms of its agricultural economy and second largest agricultural economy among the OECD countries with an agricultural land of 25 million hectares, 5.1 million hectares of arable land, 3,076 agricultural enterprises and 5.3 million people employed in agricultural sector.

Table 4. 1 Share of Agriculture in GDP, Employment and Trade, Turkey

Year	GDP	Employment	Exports	Imports
2008	7.5	22.4	8.0	5.9
2009	8.1	23.1	10.2	6.2
2010	9.0	23.3	10.3	6.4
2011	8.2	23.3	10.7	7.2
2012	7.8	22.1	9.9	6.8
2013	6.7	21.2	11.0	6.6
2014	6.6	21.1	11.2	7.2
2015	6.9	20.6	11.4	7.4
2016	6.2	19.5	11.0	7.2

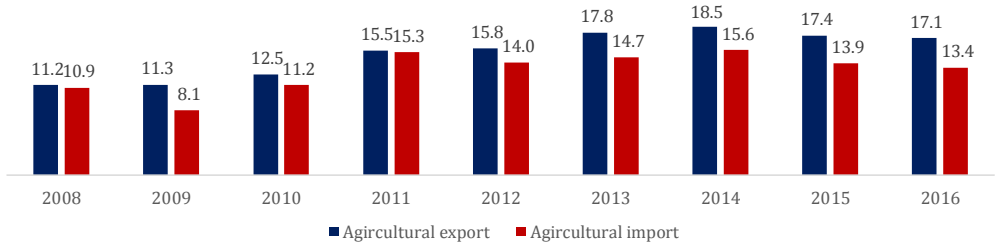
Source: CEPII BACI, Eurostat RAMON, TURKSTAT, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.1 presents the relative importance of agricultural sector in Turkey for the period of 2008-2016. The share of agriculture in GDP declined from 7.5% to 6.2% while the share of agricultural sector in employment has been around 20% throughout the time period, reflecting the significance of agriculture in maintaining the livelihoods of the people. The share of agricultural sector in exports has been within the range of 8% to 11.4% while the share of agricultural imports is within the range of 5.9% to 7.4%. Both export share and import share of agricultural products show an increasing trend during the 2008-2016 period.

With its strong production and trade potential, Turkey is well placed geographically in proximity to regional markets and has good export opportunities in Europe, Middle East and former Soviet Union. Turkey is the top producer of hazelnuts, apricots, figs, dried raisins and cherries and top exporter of hazelnuts, dried raisins, apricots, figs and chickpeas. In terms of trade balance in

agriculture, Turkey has a trade surplus in agricultural products. Export of agricultural products were 17.1 billion USD, and imports of agricultural products were 13.4 billion USD with a trade surplus of 3.7 billion USD in 2016 (see Figure 4.1).

Figure 4. 1 Agricultural Exports and Imports, Billion USD, Turkey

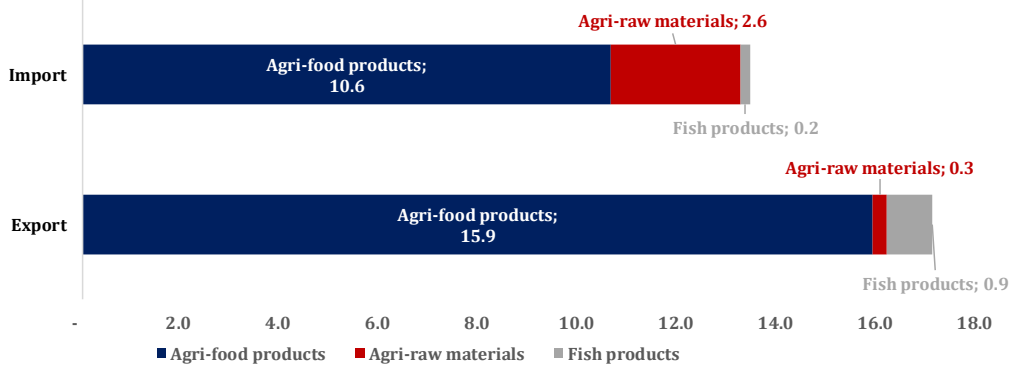


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Within subgroups of agricultural products,

- Exports of agri-food products were 15.9 billion USD and imports of agri-food products were 10.6 billion USD with a trade surplus of 5.3 billion USD in 2016.
- Exports of agricultural raw materials were 289 million USD and imports of agricultural raw materials were 2.6 billion USD with a trade deficit of 2.3 billion USD in 2016 (Aydın and Aydın, 2018).
- Exports of fish products were 906 million USD and imports of fish products were 194 million USD with a trade surplus of 712 million USD in 2016 (see Figure 4.2).

Figure 4. 2 Agricultural Exports and Imports, Product Groups, Billion USD, Turkey, 2016



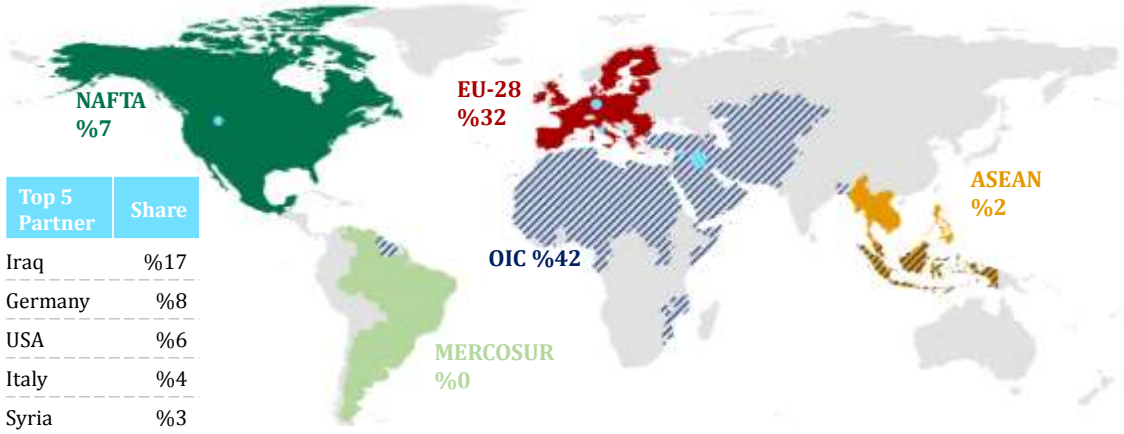
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Trade policies in Turkey in terms of preferential trade agreements are influenced by the European Union policies since Turkey is in Customs Union (CU) with the EU. However, since the cu excludes agriculture, Turkey can design its agricultural trade policy independently. Interestingly, the World Bank, in its 2014 evaluation report of the EU-Turkey Customs Union, suggested widening the customs union to cover agriculture (World Bank, 2014). Currently, turkey has free trade agreements with 21 countries worldwide including 8 OIC member countries (Albania, Egypt, Jordan, Malaysia, Morocco, Palestine, Syria, and Tunisia) (T. C. Ticaret Bk., 2018) those agreements cover, partially and preferentially, both industrial and agricultural products.

In its 2023 Vision for Agriculture, it is stated that Turkey aims to become a country that can feed its population with sufficient amounts of safe and high-quality foods, being a net exporter of

agricultural products while improving its competitiveness and influential in agriculture both regionally and globally.

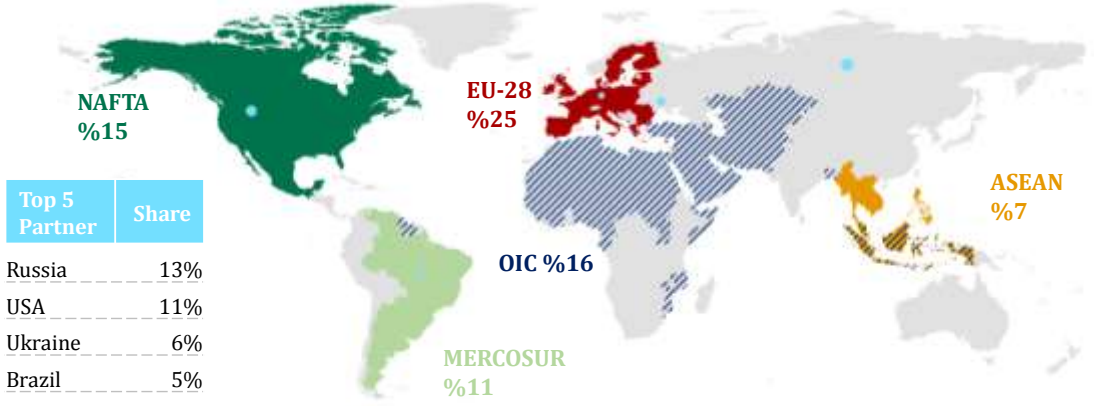
Figure 4. 3 Breakdown of Turkey's Agricultural Export Destinations, 2016



Top 5 Partner	Share
Iraq	%17
Germany	%8
USA	%6
Italy	%4
Syria	%3

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 4 Breakdown of Turkey's Agricultural Import Origins 2016



Top 5 Partner	Share
Russia	13%
USA	11%
Ukraine	6%
Brazil	5%
Germany	4%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Table 4. 2 Value & Share of OIC in Turkey's Agricultural Trade

Year	Value (exports) billion USD	Share in Turkey's total agricultural exports, %	Value (imports) billion USD	Share in Turkey's total agricultural imports, %
2008	3.3	29.7	1.8	16.9
2009	3.7	33.3	1.2	14.3
2010	4.3	34.2	1.8	15.8
2011	6.2	40.3	2.1	13.8
2012	6.6	42.1	1.9	13.3
2013	7.5	42.3	2.2	14.8
2014	7.6	41.2	2.2	14.2
2015	6.9	39.8	2.1	14.7
2016	7.3	42.5	2.1	15.9

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

4.1.1. Agricultural Trade with the OIC Countries

General overview

OIC member countries have been close trade partners for Turkey, and Turkey stands out as a strong export hub in agricultural trade within the OIC (COMCEC, 2018b).

As shown in Table 4.2, the value of Turkey's agricultural exports to the OIC countries has increased from 3.3 billion USD in 2008 to 7.3 billion USD in 2016 (121% increase) with a percentage share in total agricultural exports increasing from 29.7% to 42.5% during the 2008-2016 period. The total value of Turkey's agricultural imports from OIC countries is smaller than its exports, demonstrating a trade surplus. The value of agricultural product imports from OIC countries has been within a range of 1.2 billion USD to 2.2 billion USD during the 2008-2016 period. The share of OIC countries in Turkey's total agricultural imports has decreased slightly from 16.9% in 2008 to 15.9% in 2016.

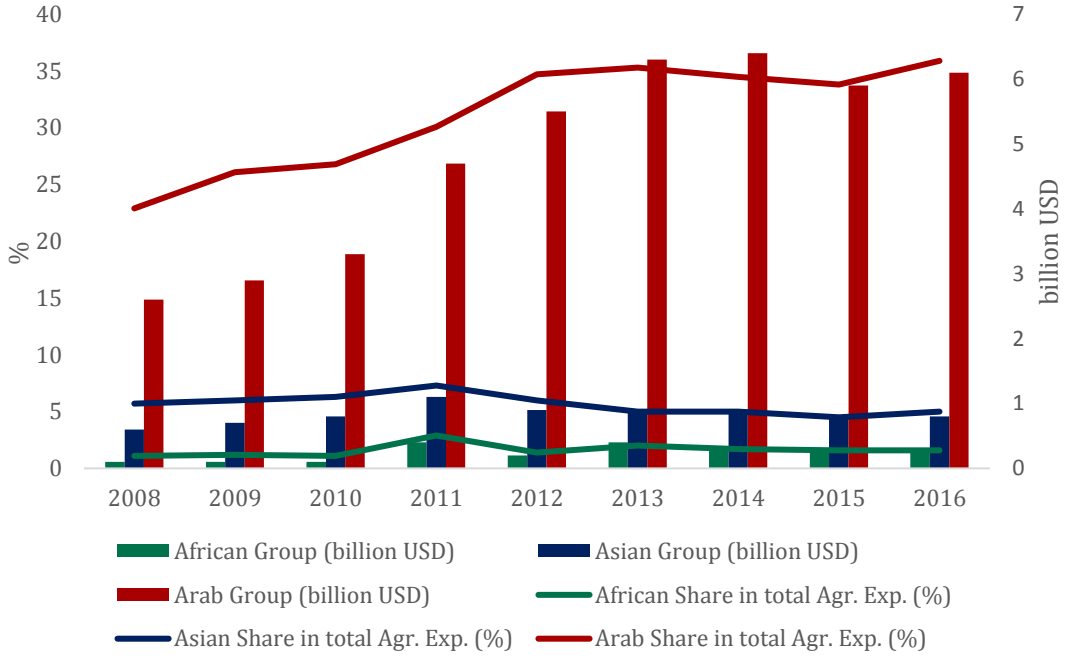
Figure 4.5 shows the distribution of Turkey's agricultural exports according to the three OIC member country groups. Exports to the Arab group increased from 2.6 billion USD in 2008 to 6.1 billion USD in 2016, representing a share of 22.9% and 35.9% in total agricultural exports for 2008 and 2016, respectively. The Arab group countries has the largest share in Turkey's total agricultural exports followed by the Asian group and the African group**.** The Asian group's share has been within the range of 4.5% and 7.3% during the 2008-2016 period. The share of Turkey's agricultural exports to the African group has been relatively stable throughout the time period, reflecting a percentage share of 1% to 3%.

Figure 4.6 shows the distribution of Turkey's agricultural imports according to the three OIC member country groups. Imports from the African and the Arab groups increased from 0.2 billion USD each to 0.6 billion USD and 0.4 billion USD, respectively. These two groups have also exhibited increasing shares within Turkey's total agricultural imports. The Asian group has the largest share and value in Turkey's agricultural imports. However, the total value of the Asian group decreased from 1.4 billion USD to 1.1 billion USD from 2008 to 2016. The corresponding share decreased from 13.3% to 8.5% within the same period.

With regards to distribution of exports across country groups and product groups, Figure 4.7 shows that the Arab group countries is a significant market for Turkey's agri-food product exports. The share of the Arab group in Turkey's total agri-food exports increased from a share of 24.2% to 37.9% in 2016, reflecting more than 1/3 of Turkey's global agri-food exports. The share of the Asian group is within a range of 4.6% to 7.5% while the share of the African group is within a range of 1.2% to 3.1%, reflecting stable but small shares in for Turkish agri-food exports.

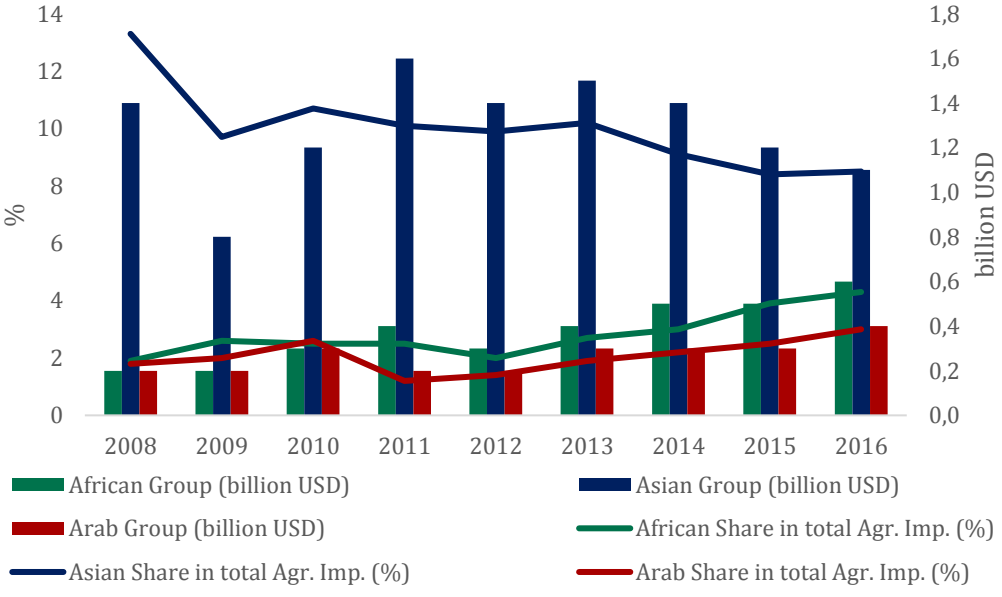
Examining the distribution of imports across country groups, Asian group countries have the highest share of OIC countries in Turkey's total imports of agri-food products, however the share is declining. Figure 4.8 shows that the share of Asian group in Turkey's total agri-food product imports has declined from 14% in 2008 to 7% in 2016. Contrary to the Asian group, the share of the African group and Arab group in Turkey's total agri-food product imports have been increasing, reflecting a probable shift of imports from the Asian group to the favor of Arab group and African group.

Figure 4. 5 Shares of OIC Groups in Turkey's Agricultural Exports



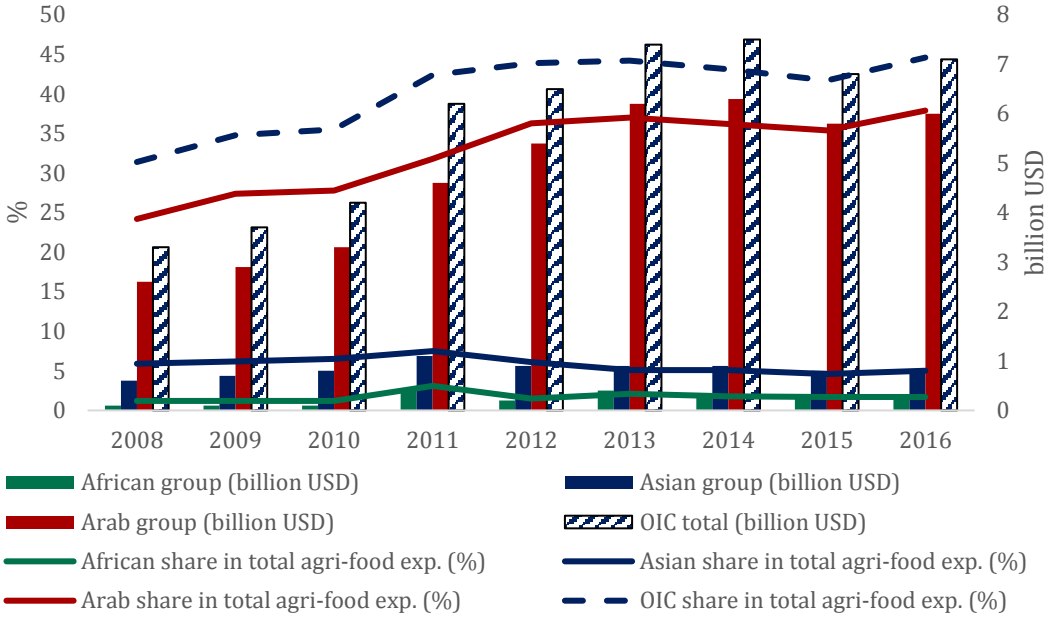
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 6 Shares of OIC Groups in Turkey's Agricultural Imports



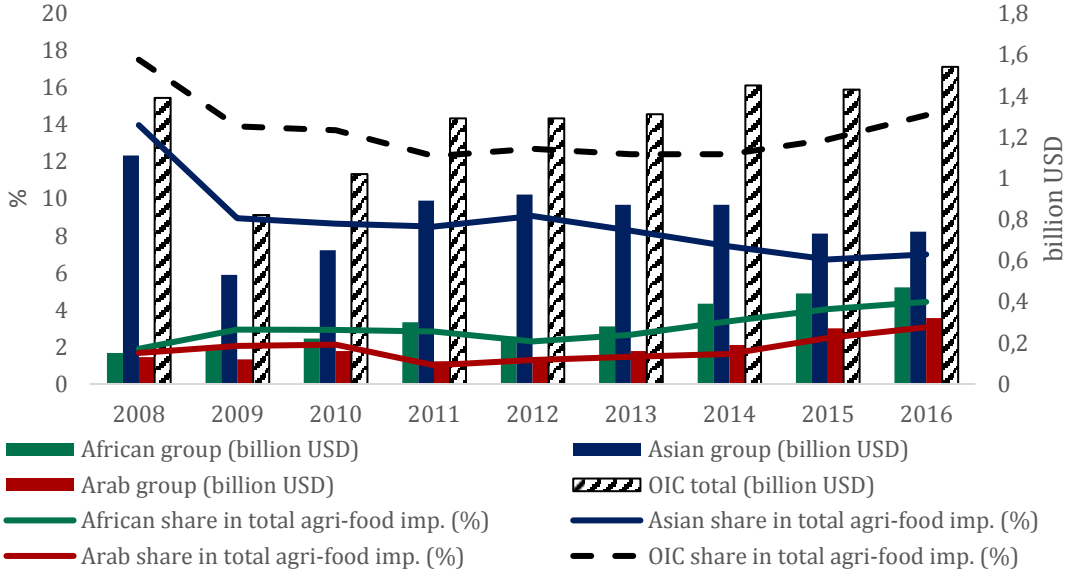
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 7 Exports of Turkey's Agri-Food Products to the OIC Groups



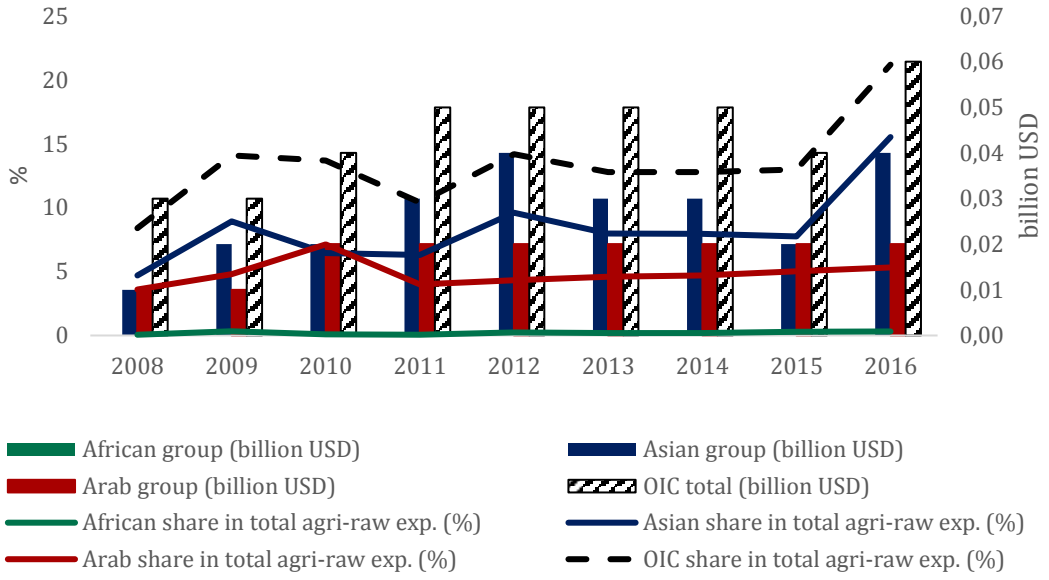
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 8 Imports of Turkey's Agri-Food Products from the OIC Groups



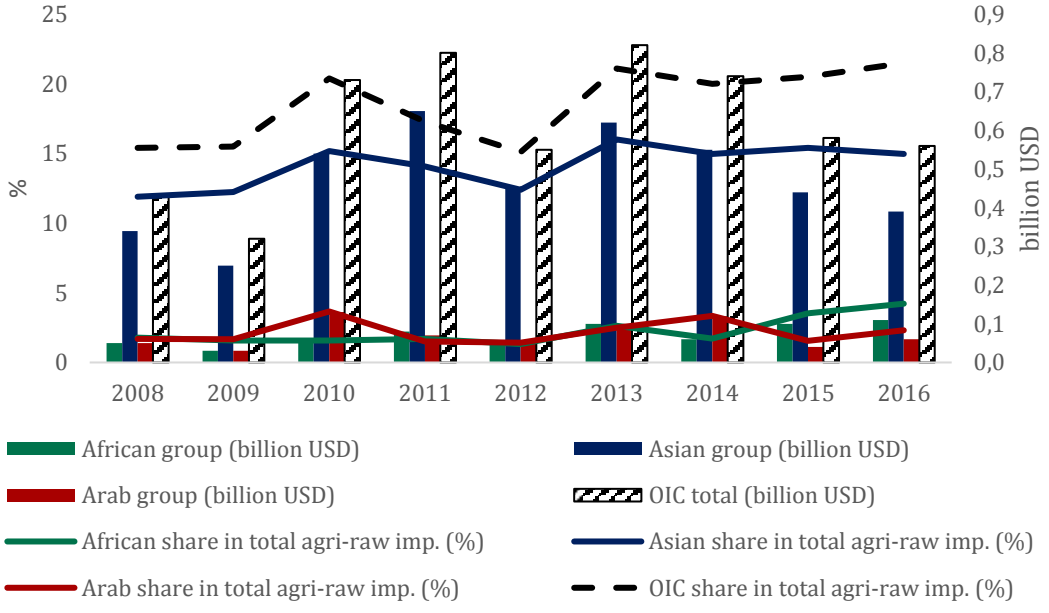
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 9 Exports of Turkey's Agricultural Raw Materials to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 10 Imports of Turkey's Agricultural Raw Materials from the OIC Groups

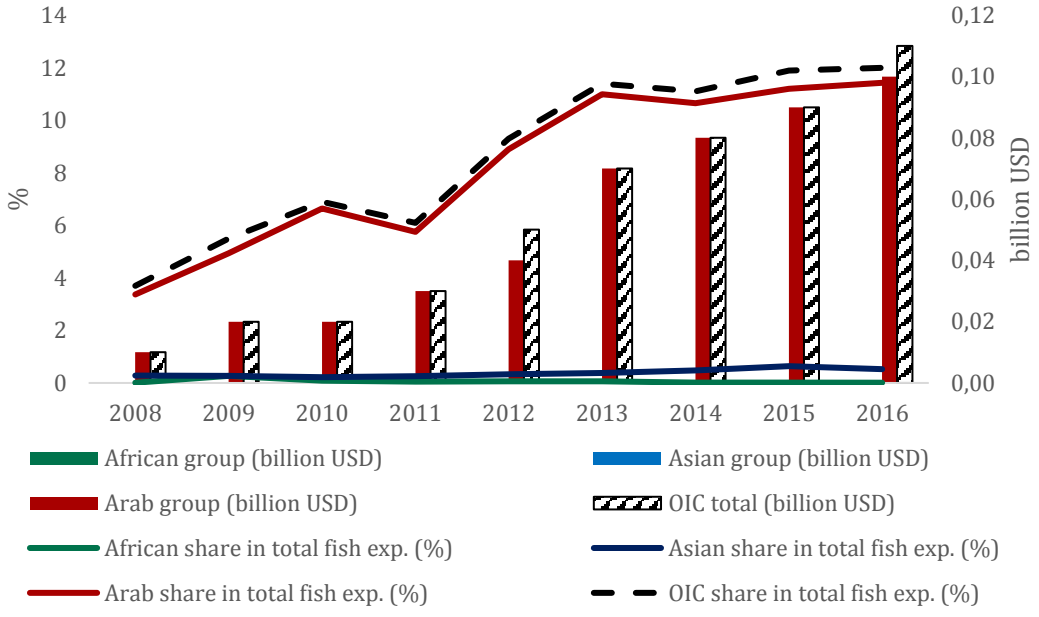


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The share of African group in Turkey's total exports in agricultural raw materials is very small. The share of Asian group in Turkey's agricultural raw material exports is the highest among the three country groups with an increase from 4.7% to 15.5% during the 2008-2016 period. The share of Arab group in Turkey's agricultural raw materials is smaller than that of the Asian group with a slight increase from 3.6% to 5.3% percent in Turkey's total agricultural raw material exports (see Figure 4.9).

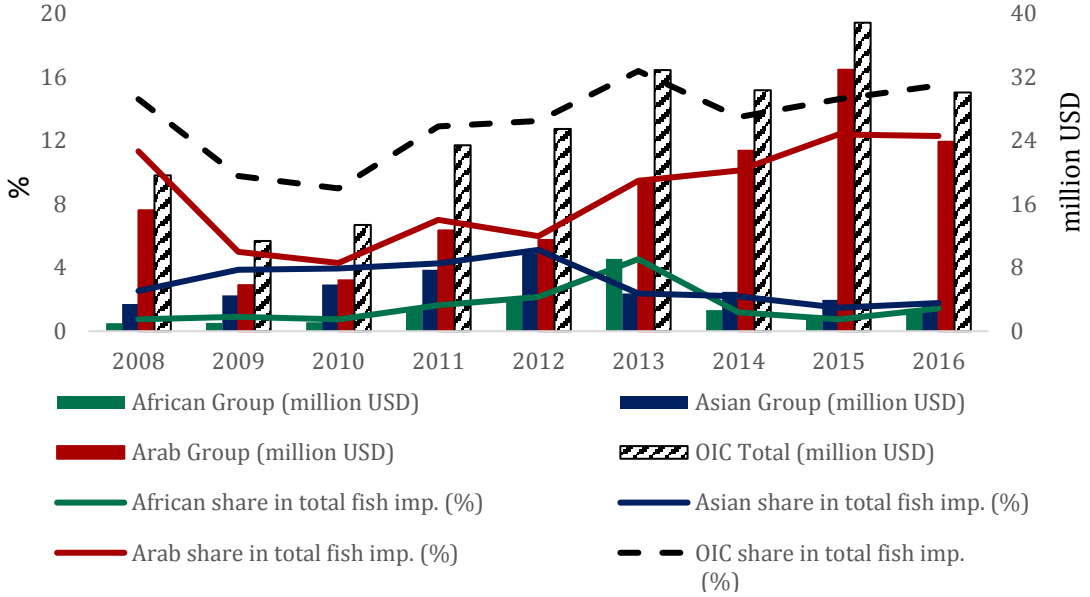
Asian group has the largest share in Turkey's total imports of agricultural raw materials and the share has increased from 11.9% in 2008 to 15% in 2016. Figure 4.10 shows that the shares of the Arab group and African group is small in total imports of Turkey's agricultural raw materials.

Figure 4. 11 Exports of Turkey's Fish Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 12 Imports of Turkey's Fish Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

With regards to fish products, Arab group has the highest share in Turkey's total fish exports, followed by Asian group and African group. The share of Arab group in Turkey's fish exports

increased from 3.4% to 11.4% in the 2008-2016 period. The shares of African group and Asian group are very small in Turkey's total fish exports (see Figure 4.11).

With regards to fish imports, the share of the Arab group in Turkey's total imports of fish is highest with 12.3% in 2016. Figure 4.12 shows that the shares of Africa group and Asia group are smaller with shares within a range of 0.7% to 5%.

In summary,

- Arab group has the highest share in Turkey's agri-food exports with a share of 37.9% in 2016, followed by Asian group and African group with respective shares of 5.0% and 1.7%.
- Asian group has the highest share in Turkey's agri-food imports with a share of 7.0% in 2016, followed by African group and Arab group with respective shares of 4.4% and 3.1%.
- Asian group has the highest share in Turkey's agricultural raw material exports with a share of 15.5% in 2016, followed by Arab group and African group with respective shares of 5.3% and 0.3%.
- Asian group has the highest share in Turkey's agricultural raw material imports with a share of 15% in 2016, followed by African group and Arab group with respective shares of 4.2% and 2.3%.
- Arab group has the highest share in Turkey's fish exports with a share of 11.4% in 2016, followed by Asian group and African group with respective shares of 0.5% and 0.0%.
- Arab group has the highest share in Turkey's fish imports with a share of 12.3% in 2016, followed by Asian group and African group with respective shares of 1.8% and 1.4%.

Top 5 agricultural export and import products of Turkey in the OIC markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Turkey's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

04:	Cereals and cereal preparations
05:	Vegetables and fruit
11-12:	Beverages and tobacco
41-42-43:	Animal and vegetable oils, fats and waxes
02:	Dairy products and birds' eggs

with percentage shares of 27.3%, 17.0%, 10.5%, 10.5%, and 7.7%, respectively.

With regards to Turkey's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Turkey's total agricultural imports from the OIC countries are (top 5 agricultural import products to the OIC):

41-42-43:	Animal and vegetable oils, fats and waxes
263:	Cotton
07:	Coffee, tea, cocoa, spices, and manufactures thereof
22:	Oil-seeds and oleaginous fruits
05:	Vegetables and fruit

with percentage shares of 25.9%, 18.0%, 12.4%, 9.2%, and 7.5%, respectively.

Table 4. 3 Distribution of Turkey's Top 5 Export Products according to Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	1.1	4.7	22.8	71.3	100
2009	1.1	5.2	25.7	67.9	100
2010	1.1	5.2	26.3	67.4	100
2011	1.4	6.6	30.8	61.3	100
2012	1.4	4.7	34.5	59.4	100
2013	2.1	4.1	34.0	59.8	100
2014	1.7	4.2	33.4	60.7	100
2015	1.5	3.9	32.8	61.9	100
2016	1.5	4.3	36.5	57.7	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The products in the two list are not mutually exclusive. "Animal and vegetable oils, fats and waxes" and "vegetables and fruits" are products that are both commonly exported to and imported from OIC countries. The reason may be that the combinations of the product groups according to higher digits are different and that export products and import products at higher digit SITC levels are different.

Table 4.3 shows the distribution of the top 5 agricultural export products to the OIC according to destinations. The share of non-OIC countries in total OIC exports of top five agricultural export products has declined from 71.3% to 57.7% over the period between 2008 and 2016. During the observation period, the share of the Arab group increased from 22.8% to 36.5% in total OIC exports at the expense of non-OIC countries, while the shares of African and Asian group did not change much.

Table 4.4 shows the distribution of top 5 agricultural import products from the OIC countries according to the region of origin. The share of non-OIC countries in Turkey's top agricultural import products increased from 76.5% to 84.2% during the 2008-2016 period. During the same period, the share of the Asian group declined from 21.5% to 12.9 and the share of African and Arab group did not change much. The share of the Asian group declined at the expense of non-OIC countries.

Table 4. 4 Distribution of Turkey's Top 5 Import Products, according to Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.1	21.5	1.9	76.5	100
2009	0.3	13.9	2.9	82.9	100
2010	0.4	16.2	2.9	80.5	100
2011	0.6	15.0	1.1	83.3	100
2012	0.5	16.4	1.4	81.7	100
2013	0.5	13.4	1.2	84.9	100
2014	0.5	11.5	1.2	86.8	100
2015	0.6	11.4	1.5	86.6	100
2016	1.1	12.9	1.8	84.2	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.5 shows that Iraq is the largest importer of Turkey's top five agricultural export products in the OIC market. The share of Iraq in the last available three-year average is 43.7% while the second largest market (Syria) has a share of 8.9%. The lower share is due to the ongoing conditions in Syria. The third largest market is Saudi Arabia, followed by Iran and Sudan.

Table 4. 5 Top 5 OIC Destination Countries for Turkey's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, billion USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Iraq	2.3	43.7
Syria	0.5	8.9
Saudi Arabia	0.4	7.0
Iran	0.2	3.9
Sudan	0.2	3.1

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.6 shows the first 5 markets from which Turkey purchases the highest agricultural imports in the OIC market. Malaysia is the largest market for Turkey's top five agricultural product imports from OIC countries with a share of 24%, followed by Cote d'Ivoire, Turkmenistan, Indonesia, and Nigeria.

Table 4. 6 Top 5 OIC Origin Countries of Turkey's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, billion USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Malaysia	0.4	24.0
Cote d'Ivoire	0.2	15.3
Turkmenistan	0.2	14.1
Indonesia	0.2	12.7
Nigeria	0.1	7.7

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

4.1.2. Agricultural Trade Policies in Turkey

Background[13]

Turkey has signed the Ankara Agreement with the European Economic Community (EEC) in 1963. This agreement has had a Customs Union dimension that forced Turkey to gradually prepare the economy to tariff reductions. The first two rounds of tariff reductions have been implemented in 1973 and 1976, respectively. After years of negotiations, a Customs Union (CU) between the EU and Turkey has been put into practice in January 1st 1996.

The CU covers all manufactured goods, thereby implying the same tariff profiles for these goods in terms of MFN duties between the EU and Turkey. On the other hand, the CU does not cover primary agriculture from the very beginning. This allows Turkey to set tariffs higher than the EU levels in certain products.

As a member of WTO since 1995, Turkey is bound to comply with the framework of the Agreement on Agriculture. Tariff reductions have been applied since the mid-1990s, and Turkey has also met commitments in Quantitative Restrictions and reductions in Export Subsidies.

Governments in Turkey have traditionally supported the agricultural sector using various methods. Before the 2000s, government support purchases and credit subsidies have been typical instruments, but a more market-oriented policy stance has been followed through the Agricultural Reform Implementation Project from 2001 to 2008. The GDP share of total

[13] Larson et al. (2015), the Turkish Exporters' Assembly's 2016 Agricultural Report written by Professors Erol Çakmak and Haluk Kasnakoğlu, and COMCEC (2014b) are being followed in summarizing the background on agricultural trade policies in Turkey.

agricultural support has declined from about 4.5% in the early 2000s to nearly 2.5%, it is still sizably larger than the OECD and EU averages of about 0.6%. Besides, the share of price supports within the total agricultural support is about 3-4 times larger than the EU average.

Tariffs

Tariffs in agriculture are typically larger than tariffs in non-agricultural sectors. According to the most recent WTO Tariff Profile Summary for Turkey, the simple average MFN applied tariff for agriculture (roughly equal to 40%) is about 8 times larger than the corresponding average for non-agricultural products in 2017. The corresponding ratio for 2016 is around 10.

The frequency distribution of MFN applied tariffs show that a majority of tariff rates in 2017 are larger than 15% where nearly half of all agricultural tariff lines have rates larger than 25%.

Looking at the product lines, applied MFN rates for animal and dairy products remain larger than 100%. With the notable exception of cotton that has 0% MFN applied tariff rate, all agricultural products have MFN rates remaining larger than 10%.

Table 4. 7 OIC Member Countries that Export to Turkey under Preferential Tariffs

African Group	Arab Group	Asian Group
Benin	Comoros	Afghanistan
Burkina Faso	Djibouti	***Albania***
Chad	***Egypt***	Bangladesh
Côte d'Ivoire*	***Jordan***	Indonesia*
Gambia	Mauritania	Iran
Guinea	***Morocco***	Kyrgyzstan
Guinea-Bissau	Somalia	Pakistan
Mali	***Palestine***	Tajikistan
Mozambique	Sudan	Uzbekistan
Niger	***Tunisia***	***Malaysia****
Nigeria*	Yemen	
Senegal		
Sierra Leone		
Togo		
Uganda		

Source: WTO RTA Database.
Note: Countries marked with an asterisk are among the top 5 OIC countries from which Turkey's top import products are imported. Countries written in boldface letters have a free trade agreement in force with Turkey.

A quick comparison with the EU reveals that Turkey's applied average MFN tariffs are larger than the EU levels in animal products, dairy products, fruits and vegetables, and coffee and tea. On the other hand, in beverages and tobacco, fish and fish products, cereals and preparations, sugars and confectionery and in other agricultural products, average applied MFN rates are nearly identical for EU and Turkey.

Turkey's overall applied tariff average increased due to requests by domestic producers. There is a possibility that the tariff rates will increase further. Tariff schedules are bound 100% of agricultural tariff lines and 34% of industrial tariff lines. There are significant differences in the rates of agricultural versus industrial products and average rates for agriculture are 49% and only 5.5% for industrial products. Tariff protection is particularly high, averaging over 80%, on meat, dairy, sugar and confectionary.

Turkey applies preferential tariffs to a diverse set of countries. The entire list includes the EU and EFTA countries, countries in special groups such as the LDCs and the GSP countries, and countries that are the beneficiaries of the incentive arrangement for sustainable development. Table 4.7 lists 35 OIC member countries that export to Turkey under preferential tariffs.

Focusing on the top 5 import products from the top 5 OIC exporters (Table 4.8), the tariff rate of the "Animal and vegetable oils, fats and waxes" remains same over the last three years while the tariff rate for coffee, oil seeds and vegetables and fruits were reduced.

Table 4. 8 Tariffs Set by Turkey for Top 5 Import Products from the OIC Exporters, %

	41-42-43: Animal and vegetable oils, fats and waxes	263: Cotton	07: Coffee, tea, cocoa, spices, and manufactures thereof	22: Oil-seeds and oleaginous fruits	05: Vegetables and fruit
2014	27.2	0.0	29.2	16.9	29.4
2015	27.5	0.0	20.5	12.5	28.9
2016	27.5	0.0	20.5	12.5	28.9

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

With regards to tariff rates for Turkey's top five export products, Table 4.9 presents the available data. The 2016 tariff rates demonstrate that tariff rates for dairy products are lowest while the tariff rates for beverages and tobacco are highest.

Table 4. 9 Tariffs Set by OIC Countries for Turkey's Top 5 Export Products, %

	04: Cereals and cereal preparations	05: Vegetables and fruit	11-12: Beverages and tobacco	41-42-43: Animal and vegetable oils, fats and waxes	02: Dairy products and birds' eggs
2016	20.3	13.0	41.7	11.6	9.0

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

NTMs

Turkey has harmonized the SPS measures with the EU by adopting the main framework law on SPS. Following the 2010 adoption of the main framework law on SPS (the Law on Veterinary Services, Plant Health, Food and Feed), Turkey has adopted and implemented many of the regulations during the review period, thus, approximately 100 regulations have been put in place as secondary legislation. Regarding TBT matters, Turkey revised its regulations in 2012 to conform to the EU in the areas of CE marking, conformity assessment bodies, and notified bodies. Both imports and exports are subject to a number of border measures in Turkey, including outright prohibitions, licensing, controls, and restrictions (WTO, 2016)

Table 4.10 summarizes the numbers of NTMs that have been imposed by Turkey and that are currently in force for agri-food products, agricultural raw materials and fish products. Clearly, a vast majority of NTMs imposed by Turkey are either export subsidies or SPS measures. Besides, nearly all of the NTMs reported are imposed on agri-food products.

Table 4. 10 The Numbers Of NTMs Imposed by Turkey, In Force

	Export Subsidies	Quantitative Restrictions	Sanitary & Phyto-sanitary Measures	Technical Barriers to Trade	Total
Agri-Food	39	4	28	4	75
Fish	1	1	1		3
Agri-Raw		3			3

Source: WTO I-TIP, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table 4. 11 NTMs of Turkey's Top 5 Import Products from Top 5 OIC Exporters

	41-42-43: Animal and vegetable oils, fats and waxes	263: Cotton	07: Coffee, tea, cocoa, spices, and manufactures thereof	22: Oil-seeds and oleaginous fruits	05: Vegetables and fruit
2010	1				
2011	2				1
2012	2		1	1	1
2013	1		1	1	1
2014	3		3		1
2015	1		1		1
2016	3			1	1

Source: WTO I-TIP, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4. 12 NTMs Applied to Turkey's Top 5 Export Products by Top 5 OIC Importers

	04: Cereals and cereal preparations	05: Vegetables and fruit	11-12: Beverages and tobacco	41-42-43: Animal and vegetable oils, fats and waxes	02: Dairy products and birds' eggs
2008	1	1	1	1	1
2009	1	2	1	1	1
2010	2	3	2	2	2
2011	2	2	2	2	2
2012	2	3	1	1	2
2013	2	2	2	7	2
2014	2	2	1	2	2
2015	2	2	2	1	5
2016	3	3	2	2	3

Source: WTO I-TIP, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The NTM summaries of Turkey indicate that, in 2016, vegetable and animal product groups have over 95% and 92% NTM coverage ratios, respectively. These correspond to NTM affected product counts of 309 and 186 products, respectively.

Tables 4.11 and 4.12 collect the numbers of NTMs of Turkey's top 5 import products from OIC and top 5 export products to OIC as identified above. The overall stance of Turkey's NTM practices for its top 5 imports from the OIC does not exhibit major changes from 2010 to 2016.

Tables 4.13 and 4.14 collect more specific information about the number of different types of NTMs imposed by Turkey on agricultural products and by how much trade is affected from the imposition of these NTMs. Nearly 60% of animal products are subject to NTMs and this ratio is around 88% in vegetables and close to 100% in hides and skins.

Table 4. 13 NTM Types and NTM Affected Products, Turkey

Sector	NTM Type Count	Share %	NTM affected product - count
Animal	1 type	7.7	26
Animal	2 types	18.8	63
Animal	3+ types	34.2	115
Animal	No NTMs	39.3	132
Vegetable	1 type	30.7	108
Vegetable	2 types	17.1	60
Vegetable	3+ types	44.9	158
Vegetable	No NTMs	7.4	26
Food Products	1 type	25.1	53
Food Products	2 types	37.9	80
Food Products	3+ types	24.2	51
Food Products	No NTMs	12.8	27
Hides and Skins	1 type	11.6	8
Hides and Skins	2 types	46.4	32
Hides and Skins	3+ types	40.6	28
Hides and Skins	No NTMs	1.5	1
Wood	1 type	11.1	26
Wood	2 types	1.3	3
Wood	3+ types	31.1	73
Wood	No NTMs	56.6	133

Source: phytosanitary

Trade agreements and cooperation

Turkey is among the OIC countries that have submitted their updated list of concessions for the Trade Preferential System within the OIC (TPS-OIC)

Turkey has FTAs currently "in force" with 8 OIC member countries. These are Palestine (since 2005), Tunisia (since 2005), Morocco (since 2006), Syria (since 2007), Egypt (since 2007), Albania (since 2008), Jordan (since 2011) and Malaysia (since 2017). Other than the FTA with Egypt, all the other agreements have been notified under the GATT Art. XXIV. These FTAs largely cover agri-food and fish products, and agricultural raw materials are included only in the FTA with Malaysia. The FTA with Palestine includes only the "date" (HS: 0804.10).

Turkey also has Partial Scope Agreements (PSAs) with Bangladesh, Egypt, Pakistan, and Tunisia under the Protocol on Trade Negotiations (PTN) since 1973 and with Iran and Pakistan under the Economic Cooperation Organization (ECO) since 1992.

Turkey is also a member of the Mediterranean Agriculture Market Information Network (MED-AMIN) launched in February 2014. Other OIC members are Albania, Algeria, Egypt, Lebanon, Morocco, and Tunisia. The Non-OIC countries of MED-AMIN are France, Greece, Italy, Malta, Portugal, and Spain.

Table 4. 14 NTM Coverage and Frequency Ratios in Agricultural Products, Turkey

Code	Sector	CR	FR	Count
A	Animal	92.4	96.9	186
B	Animal	14.8	19.8	38
C	Animal	89.0	86.5	166
P	Animal	40.3	46.0	97
A	Vegetable	95.4	99.0	309
B	Vegetable	0.01	1.0	3
C	Vegetable	89.4	66.7	208
P	Vegetable	49.6	56.0	181
A	Food Products	51.3	74.7	145
B	Food Products	48.4	22.7	44
C	Food Products	31.9	44.3	86
F	Food Products	5.9	10.8	21
G	Food Products	0.04	0.5	1
P	Food Products	11.8	18.0	35
A	Hides and Skins	24.5	41.2	28
B	Hides and Skins	72.2	98.5	67
C	Hides and Skins	62.4	72.1	49
F	Hides and Skins	6.2	19.1	13
P	Hides and Skins	23.8	28.8	19
A	Wood	27.2	32.2	74
B	Wood	37.6	36.5	84
C	Wood	29.2	18.7	43
F	Wood	0.8	2.2	5
P	Wood	32.4	33.9	76

Source: WITS
Note: A: Sanitary and phytosanitary measures, B: Technical barriers to trade, C: Pre-shipment inspection and other formalities, F: Charges, taxes and other para-tariff measures, G: Finance Measures, P: Export related measures

4.1.3. Stakeholders' Perceptions in Turkey

To complement the statistical results presented above, a semi-structured interview is conducted with key informants in Turkey. Main organizations that are responsible for agricultural trade policies in Turkey are Ministry of Trade and Ministry of Agriculture and Forestry. With regards to NTMs, the Directorate General of Food and Control within the Ministry of Agriculture and Forestry is the responsible institution. The Ministry of Health, on the other hand, is responsible for health-related policies while food safety related matters are mostly under the responsibility of the Ministry of Agriculture and Forestry. There exists a directorate general within the Ministry of Trade specializing on trade agreements. The Ministry of Trade has two other directorate generals working on exports and imports, respectively. Two market institutions have particular importance with respect to market information and market access. The first one

is the Union of Chambers and Commodity Exchanges (TOBB), a key market institution that publishes daily prices of standardized agricultural goods at its website by using the data from the regional commodity exchanges. The second one is Agricultural Credit Cooperatives of Turkey which supplies credits to nearly 1 million agricultural producers through its large network of 17 regional unions and 1,625 cooperatives.

The key informants that were interviewed in Turkey were from Ministry of Agriculture and Forestry, Ministry of Trade, Agricultural Credit Cooperatives of Turkey, Tareks Co. Ltd., OIC SESRIC, and the Turkish Exporters' Assembly. The list of the key informants is presented in Annex D.

The key informant interview includes 9 questions (Annex C). The questions are related with (i) agricultural trade policies, with a particular focus on objectives, tools, and institutions, (ii) policies on issues such as food security, supply chains, and smallholder farmers, and (iii) major trading partners and key agricultural trade products, with a particular focus on existing and potential trade relationships with fellow OIC countries.

Agricultural trade policies

The summary presented in this subsection is focused on selected facts, issues and notions emerging from the key informant interviews.

Agricultural trade and support policies are not only focused on production volumes and farmers' welfare but also on sustainability, consumer protection and rural development. Therefore, the typical support programs of the past such as price supports, support purchases, tariffs and quotas are increasingly replaced by non-market support mechanisms. Besides, as in the case of non-agricultural products, it is of crucial importance to enter new global value chains in agriculture.

The overall policy environment in Turkish agricultural trade is liberal, but Turkey practices some strategic actions with regards to tariff protection as long as it is not against the WTO commitments. Regarding the NTMs, export subsidies and SPS measures are most commonly exercised NTMs in Turkey as underlined above.

The main policy objectives behind the SPS measures are related with public health issues. From the export side, the most widely used form of agricultural trade policy instruments are export subsidies in Turkey. The primary purpose of using such a policy tool is for sustained production and export of agricultural commodities.

Small and fragmented farms, inefficient value chains, difficulties in access to finance, and institutional and regulatory inefficiencies are the major constraints that limit the role of agricultural trade on overall development. Trading costs, difficulties in access to market information, standardization and quality issues, and NTMs, including the SPS measures, are among other trade-related constraints.

Food security, supply chains, and smallholder farmers

Agricultural supply chains involve different stages, ranging from production, processing, product delivery, and final consumption. The Ministry of Agriculture and Forestry is responsible for policy implementation and provides support programs. The supports also reach out to eligible young farmers and companies. There exists agricultural and food subsidies and grants distributed by the Ministry of Agriculture and Forestry for the production and processing of agricultural products and rural development. Banks, NGOs, regional development agencies, and chambers of agriculture are key stakeholders in the distribution of the supports.

Policies that are related to agricultural supply chains started to develop within the framework of Turkey's EU accession through pre-accession grants with an aim to improve the structure of Turkish agriculture in alignment with the EU standards. The Turkish bureaucracy realized the importance of the EU programs and started managing Turkey's own grant programs which are comparatively faster, easier to implement and arguably more effective for agricultural supply chains.

The difficulty in getting access to credit is a major obstacle for many smallholder farmers. One interesting case that is underlined is a particular form of inefficiency observed in the process of distributing supports. Some landowners rent a portion of their arable land to smallholder farms but supports are obtained by the landowner and not by the farmer.

A new subsidy program in Turkey called "National Agriculture Project" has been in force since 2017. The project has an anticipated annual budget of nearly 4 billion USD. The project is now implemented in 941 agricultural basins that are determined according to climate and soil. The aim is to subsidize strategic crops, where each basin has a specific leading product (wheat, barley, corn, rye, oats, triticale, cotton, paddy, rice, tea, tobacco, lentils, dry beans, chick peas, safflower, soy bean, sun flower, canola, hazelnuts, olives, forage crops).

The issue of seeds has been given some emphasis. Turkey has not been very successful in developing a strong set of national seeds, and this naturally creates dependency to foreign seed licenses. Many agri-food exports exhibit this sort of import dependency, and there is a need for a comprehensive national seed policy.

Lack of technical expertise is another major problem of smallholder farmers in Turkey, and long term investments that effectively educate them in the fields of processing, packaging, marketing and transportation techniques are necessary. Cooperatives and chambers stand out here as important market institutions that can contribute to this sort of knowledge transfer. In general, targeting small scale agricultural systems through public-private partnerships, increased public research, and innovative and integrated applications strengthen agricultural knowledge generation. Such dimensions of agricultural learning at the farmer level is essential to successfully open national agricultural markets to international competition. Turkish agricultural policy has become increasingly aware of the importance of such science and technology related aspects of support mechanisms.

In the Turkish case, there are active and well-managed cooperatives. But there exist too many newly established small cooperatives that target the entire sector. Such an inefficient proliferation of cooperatives result in losses of time and energy as each new cooperative necessarily starts from the scratch. Supporting the growth of existing larger cooperatives, instead of promoting new and small ones, is possibly the first-best strategy. Processes should be transparent and free of crony practices or nepotism that would harm the need-based, equitable, selective and effective distribution of agricultural supports.

Finally, with regards to agricultural supply chains, another major policy tool worth mentioning is the ongoing project on "Reducing the post- and pre-Harvest Losses." Turkey is the pioneer country among all OIC member countries in implementing policies to reduce food losses and waste. There exist regulations on warehouses and marketplaces, and some NGOs such as the Turkey Waste Prevention Foundation (TISVA) contribute to the imperative of reducing food waste.

OIC-Turkey agricultural trade relations and intra-OIC agricultural trade

Turkey is one of the major producers and exporters of certain agricultural products in the world and a major producer-exporter country of agricultural products within the OIC. This export hub role of Turkey in the OIC is also supported by the network analysis results (COMCEC, 2018b). Other than Germany and some other EU countries, the US, and countries such as Russia and Ukraine, the major trading partners include Iraq, Iran, Qatar, Kuwait, and Pakistan.

There is a strong expectation that Turkey's trade relationships with fellow OIC countries are likely to be stronger in the near future. Countries that exhibit a strong premise in this respect are Iran, Iraq, Qatar, and Saudi Arabia. These are net importers of agricultural products, and they therefore are the closest candidates to be a target market for Turkey in the upcoming years. Other than these four countries, Indonesia, Malaysia, Egypt, Tunisia, Morocco, Kazakhstan, Tajikistan and the Western Africa region as a whole are promising partners.

In Malaysia, for instance, there is a sectoral export delegation for intensifying relationships with Turkey, and Turkey now exports hazelnut to Malaysia with a strong expectation to start exporting dried fruits in the upcoming years. Turkey's ability to deliver a relatively large number of agri-food products is also seen as a key logistic advantage. Russia, for instance, may import fruits from Poland, vegetables from Spain and fresh green herbs from Italy and Greece. But Turkey in practice serves a large portion of this Russian market from a single origin.

Establishing close agricultural trade relationships is a clear win-win situation both for Turkey and for the partner OIC country. Agricultural foreign investments by Turkish businesses in partner OIC countries are also win-win situations for Turkey and the partner OIC country. Fish products are particularly interesting in this regard, especially in African countries such as Morocco and Mauritania. Such investments would benefit the partner countries through exporting to the EU under a Turkish brand. The general directorate of the Ministry of Agriculture and Forestry (abbreviated as TAGEM in Turkish) has already purchased a farm in Sudan and started producing and exporting banana. Turkey and other OIC countries should promote each other's high-quality agri-food products in their local markets; Pakistan's high quality mango and Turkey's orange are such products. Directly quoting the informant, "When a truck full of mango from Pakistan enters Turkey, it should return back to Pakistan full of Turkish oranges!".

Regional trade agreements within the OIC are assets and would serve as opportunities to facilitate higher volumes of intra-OIC agricultural trade. The Common Agricultural Policy of the EU may serve as a sample case for developing trade agreements within the OIC. But some countries are strategically opposed to such collaboration since they see major agricultural exporters as threats in their own markets.

One barrier on intra-OIC agricultural trade is geography. The OIC member countries are scattered over the world with a total of 57 member states located at four continents, i.e., Europe, Asia, Africa, and Latin America. Despite the fact that there exist many neighboring OIC countries, the average geographical distance among member states is surely higher than the corresponding average for the EU, for instance. The exchange of fresh dairy products is particularly affected from this barrier.

There exist institutional differences across the OIC member countries. Turkey here stands out as a country among those that have adopted the EU standards in SPS regulations. It may thus be a challenge for some countries to export agri-food and fish products to Turkey in the short term. Complying with Turkey's SPS rules and regulations for require high levels of investment in laboratories and human resources. Turkey is also among the OIC countries that regulate the genetically modified products through a partial restriction (COMCEC, 2017b). It goes without

saying that diseases carried over by imported meat and dairy products and fresh fruits and vegetables are always risk factors which have to be managed by using modern techniques such as tests and analyses.

The reduction of border processing times and the digitalization of commercial transactions and payment systems will be important in increasing the level of agricultural trade within the OIC. Also important are the efforts that would lead to improvements in the ease of doing business in fellow OIC countries, e.g., visa exemptions to business owners.

Halal Certification within the OIC is a critical initiative for increasing the intra-OIC agricultural trade since efforts to increase the recognition of the Halal Certification eligibility requirements among the OIC member countries may create awareness on the part of consumers.

One other avenue through which intra-OIC agricultural trade would be indirectly promoted is to design and implement projects that intensify technical cooperation among experts, technicians and administrators from the OIC member countries through exchange programs and information sharing. Cooperation among the OIC countries in terms of agricultural trade is not particularly strong. Turkey, as a top exporter of agricultural products within the OIC and a major trading partner of the Asian group through imports, has a good record of the state-of-the-art practices within the OIC. With its largely modernized SPS standards and innovative market institutions such as the Farmer Registration System, Turkey can serve as a hub country in such technical cooperation activities regarding agricultural trade policies. Indeed, the General Directorate of Agricultural Reform in the Ministry of Agriculture and Forestry began a project titled "Establishment of Database, Network Connection and Web Pages of Smallholders/ Family Farmer's Agricultural Cooperatives between OIC Member States" (project funded by COMCEC) and initiated a web portal for agricultural trade across OIC countries (www.icpcem.com) (Islamic Countries Products Common Exchange Market-ICPCEM). The project is now enduring merely with individual efforts and needs support for wider coverage and perseverance. In terms of cooperation among the OIC countries, a noteworthy example that has been mentioned by a specialist from the Ministry of Trade is that of a Kyrgyz firm that has recently expressed a formal demand for consultancy services in agricultural trade from Turkey.

4.2. Morocco

Morocco is a lower middle income country with a GDP of 109.8 billion USD and 3,041 USD per capita income in 2017. Morocco ranks 58th in GDP (PPP) and ranks 69th in real growth rate among a total of 230 countries. The average rate of economic growth in Morocco between 2010 and 2016 has been 2.2%. In 2016, Morocco's economic growth rate has been -0.2%, inflation rate has been 2.2% and unemployment rate has been 9.3%.

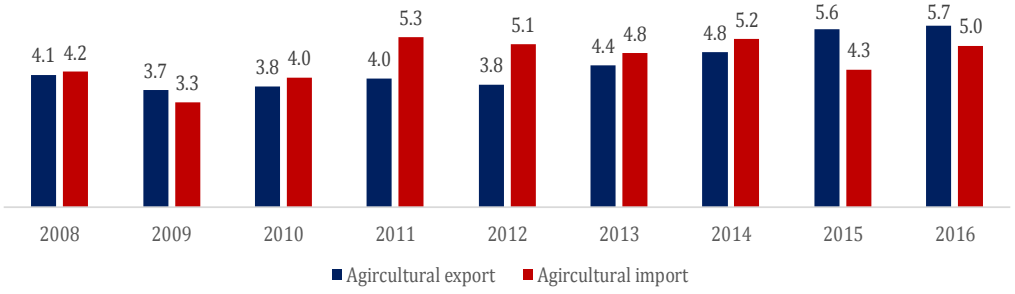
Morocco has a large agricultural sector with a 37.7% employment share of the country's working population in 2016. Agricultural sector accounts for 12% of the country's GDP with a value of 12.5 billion USD. A world leader in export of capers, green beans and argan oil; and among the leading exporters of preserved oils, clementines and tomatoes, Morocco is the 4th largest exporter of agri-food products in Africa. As of 2016, agricultural products exports are 21.9% of countries total exports.

Table 4. 15 Share of Agriculture in GDP, Employment and Trade, Morocco

Year	% share in GDP	% share in employment	% share in exports	% share in imports
2008	12.0	41.0	21.4	13.6
2009	13.0	40.5	26.5	13.5
2010	12.9	40.2	22.5	14.8
2011	13.1	39.8	19.3	15.3
2012	12.3	39.2	18.6	14.8
2013	13.4	38.1	19.7	13.3
2014	11.7	37.3	20.5	14.4
2015	12.8	38.6	20.7	11.8
2016	12.0	37.7	20.6	12.2

Source: CEPII BACI, Eurostat RAMON, World Bank, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 13 Agricultural Exports and Imports, Billion USD, Morocco

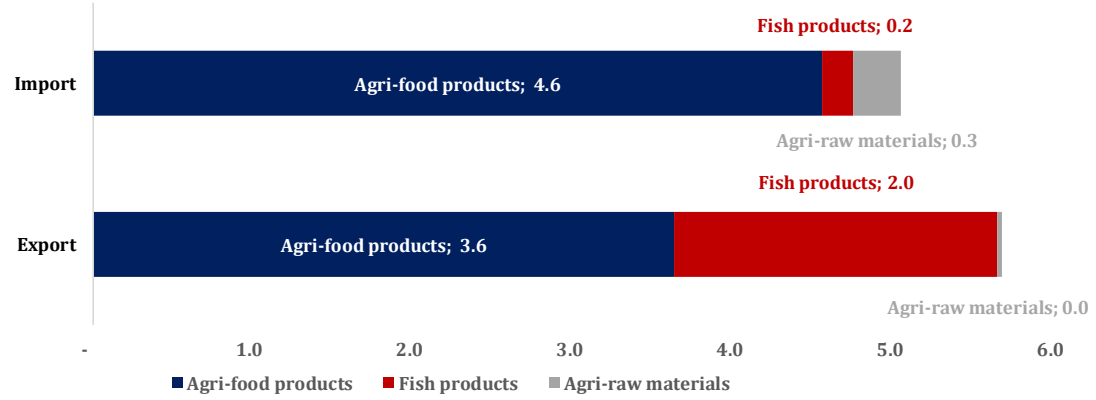


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Within subgroups of agricultural products,

- Exports of agri-food products were 3.6 billion USD and imports of agri-food products were 4.6 billion USD with a trade deficit of 0.9 billion USD in 2016.
- Exports of agricultural raw materials were 0.0 billion USD and imports of agricultural raw materials were 0.3 billion USD with a trade deficit of 0.3 billion USD in 2016.
- Exports of fish products were 2.0 billion USD and imports of fish products were 0.2 billion USD with a trade surplus of 1.8 billion USD in 2016 (see Figure 4.14).

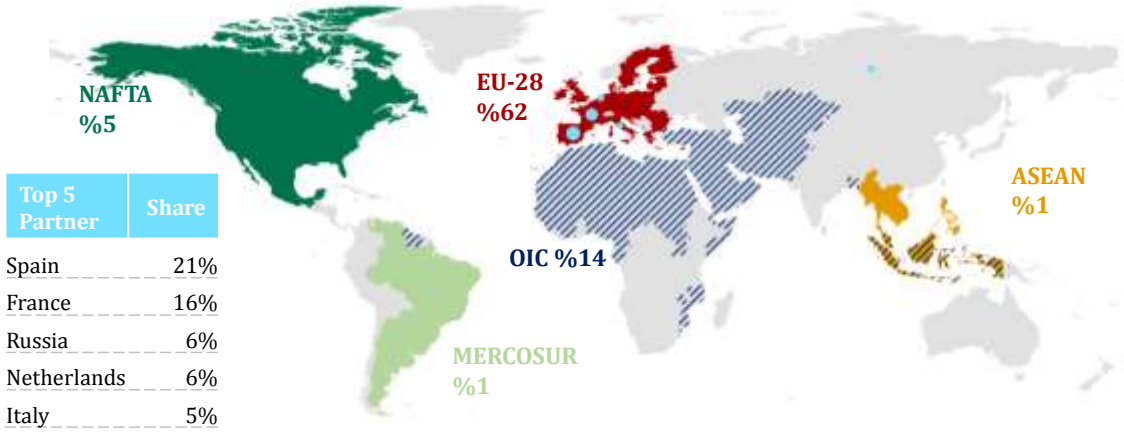
Figure 4. 14 Agricultural Exports and Imports, Product Groups, Billion USD, Morocco, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

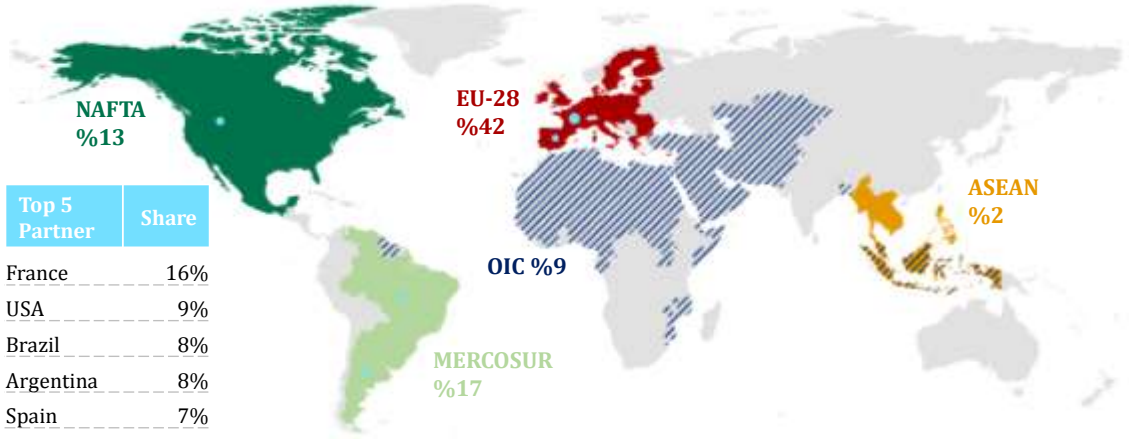
Trade policies in Morocco in terms of preferential trade agreements have been influenced by Agadir, EFTA, EU, Global System of Trade Preferences among Developing Countries (GSTP), Pan-Arab Free Trade Area (PAFTA) agreements. Most of the free trade agreements are developed in parallel to these trade blocs. Currently, Morocco is part of free trade agreements with 86 countries worldwide including 28 OIC member countries (Algeria, Bahrain, Bangladesh, Benin, Cameroon, Egypt, Guinea, Guyana, Indonesia, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Malaysia, Morocco, Mozambique, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, UAE, and Yemen). (WTO, RTA-IS)

Figure 4. 15 Breakdown of Morocco's Agricultural Export Destinations, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 16 Breakdown of Morocco's Agricultural Import Origins, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

4.2.1. Agricultural Trade with the OIC Countries

General overview

As shown in Table 4.16, OIC member countries are beginning to account for a significant part of Morocco's agricultural trade, with their increasing shares in agricultural exports and imports of Morocco. The value of Morocco's agricultural exports to the OIC countries increased from 0.2 billion USD in 2008 to 0.8 billion USD in 2016 (300% increase) with a percent share in total agricultural exports increasing from 5.6% to 14% during the 2008-2016 period. The total value of Morocco's agricultural imports from OIC countries is smaller than its exports, demonstrating a trade surplus. The value of agricultural product imports from OIC countries increased from 0.2 billion USD to 0.5 billion USD (150% increase) with a percent share in agricultural imports increasing from 5.4% in 2008 to 9.3% in 2016.

Table 4. 16 Value & Share of OIC in Morocco's Agricultural Trade

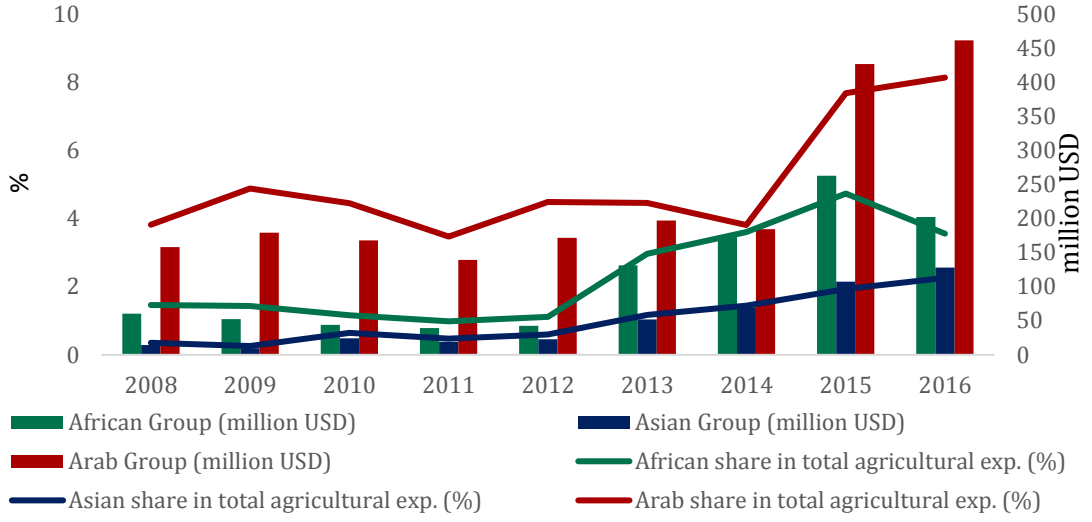
Year	Value (exports) billion USD	Share in Morocco's total agricultural exports, %	Value (imports) billion USD	Share in Morocco's total agricultural imports, %
2008	0.2	5.6	0.2	5.4
2009	0.2	6.6	0.3	7.9
2010	0.2	6.3	0.3	6.4
2011	0.2	4.9	0.3	5.9
2012	0.2	6.2	0.3	5.7
2013	0.4	8.6	0.3	7.1
2014	0.4	8.9	0.3	5.9
2015	0.8	14.3	0.4	9.2
2016	0.8	14.0	0.5	9.3

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The distribution of Morocco's agricultural exports according to the three OIC member country groups is shown in Figure 4.17. Exports to Arab group increased from 0.2 billion to USD in 2008 to 0.5 billion USD in 2016, representing a share of 3.8% and 8.1% in total agricultural exports for 2008 and 2016, respectively. Arab group has the largest share in Morocco's agricultural

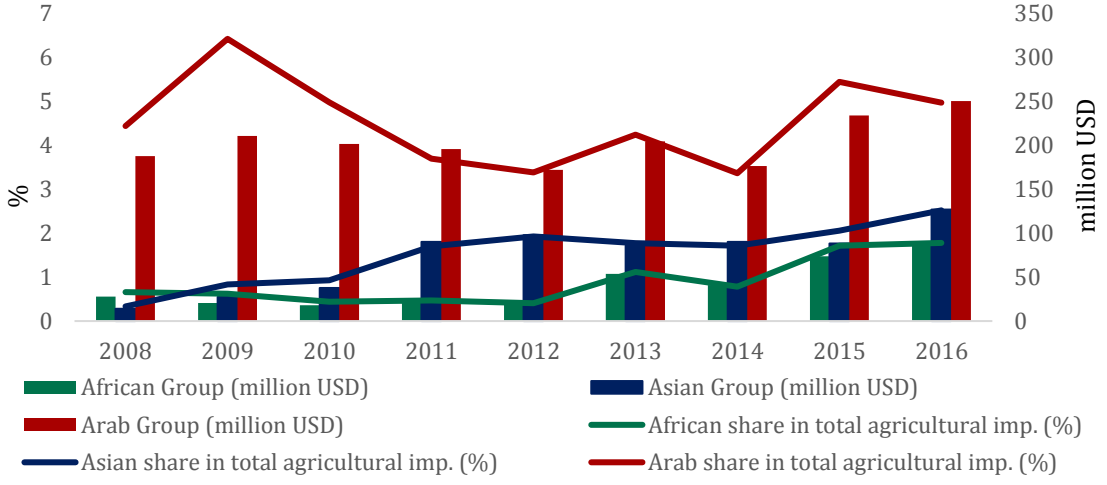
exports followed by African group and Asian group. Asian group's share increased from 1.5% to 3.6% over the period of 2008 and 2016. The share of Morocco's agricultural exports to the Asian group has been following a relatively stable trend within the same period, reflecting an increase from 0.4% to 2.3%.

Figure 4. 17 Share of OIC Groups in Morocco's Agricultural Exports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 18 Share of OIC Groups in Morocco's Agricultural Imports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

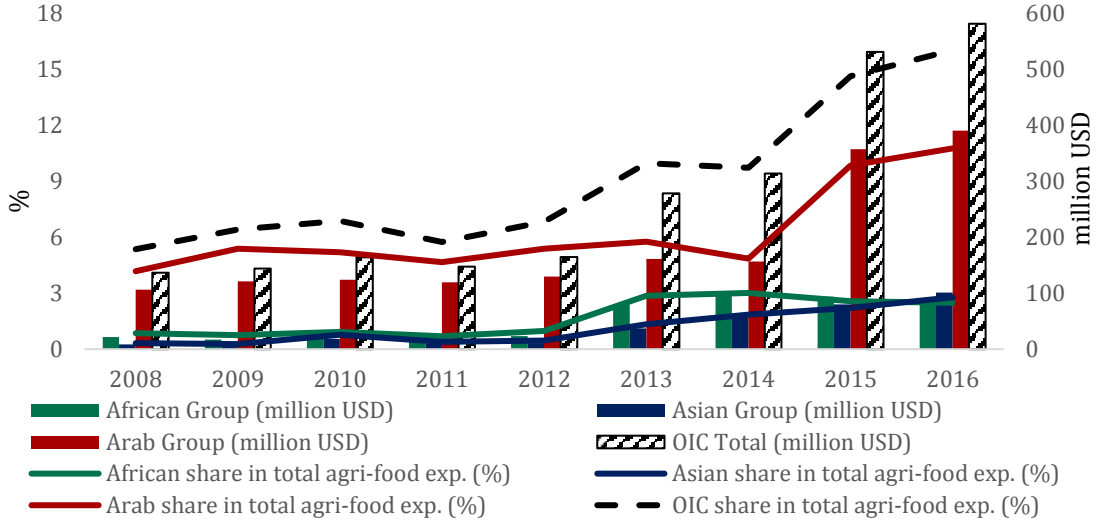
The distribution of Morocco's agricultural imports according to the three OIC member country groups is shown in Figure 4.18. The share of Arab group decreased from 4.4% to 3.4% from 2008 to 2014, but recovered with an increase to 5% in 2016. All three groups exhibited increasing shares and values in Morocco's agricultural imports over the period of 2008 and 2016. The share of Asian group increased from 0.3% to 2.5% with an increase of 0.1 billion USD in volume. The African group's share increased from 0.7% to 1.8% with an increase of 0.1 billion USD in volume during the same period.

With regards to the distribution of exports across country groups and product groups, it has been shown in Figure 4.15 that the OIC country groups all have increasing shares in Morocco's agri-food exports.

Arab group's share increased from 4.2% to 10.8% from 2008 to 2016, with an increase from 0.1 billion USD to 0.4 billion USD. Asian and African groups have small but gradually increasing shares during the period.

Asian group's share increased from 0.3% to 2.8%, while African group's share increased from 0.9% to 2.5% for 2008 and 2016, respectively.

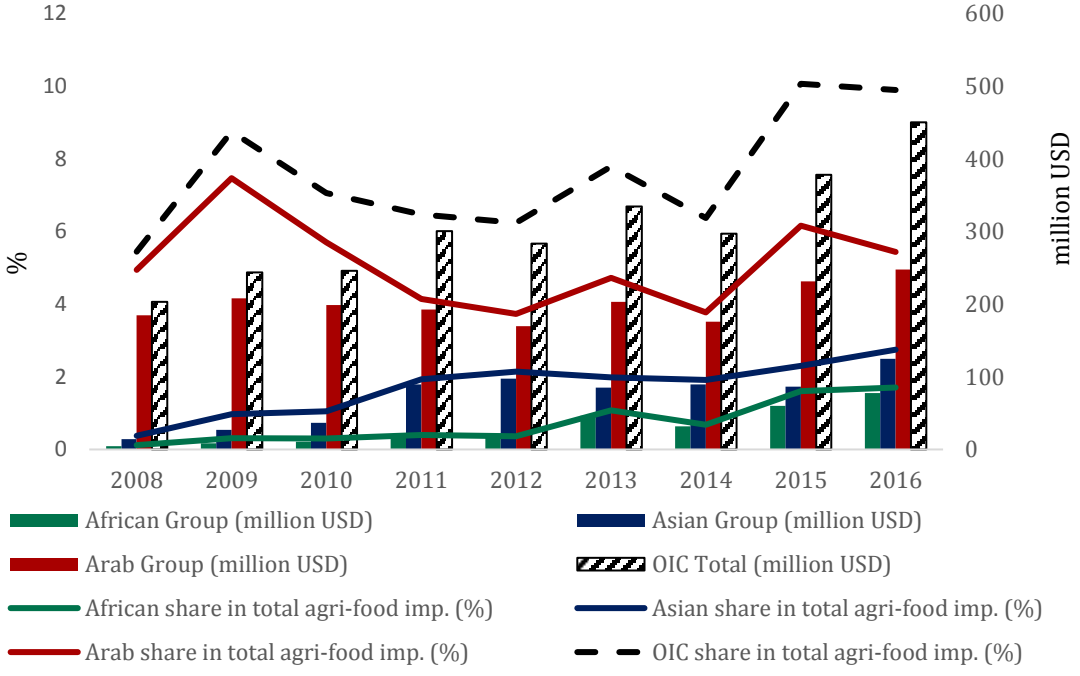
Figure 4. 19 Exports of Morocco's Agri-Food Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

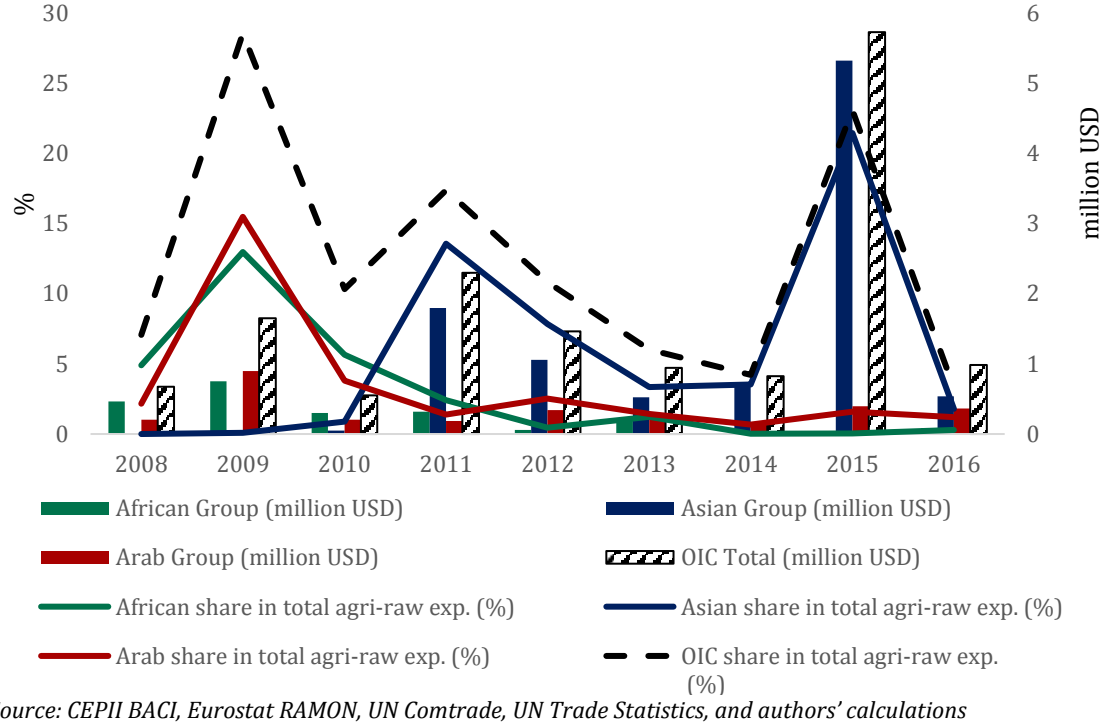
The total share of OIC countries in Morocco's agri-food imports increased from 5.4% to 9.9% during the 2008-2016 period. Arab group recovered from a decrease to 3.7% in 2012 from 4.9% in 2008, with an increase to 5.4% in 2016. During the same period, African group and Asian group both experienced increases in shares, with Asian group's share increasing from 0.4 to 2.7%, while African group's share increasing from 0.1% to 1.7%.

Figure 4. 20 Imports of Morocco's Agri-Food Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 21 Exports of Morocco's Agricultural Raw Materials to the OIC Groups



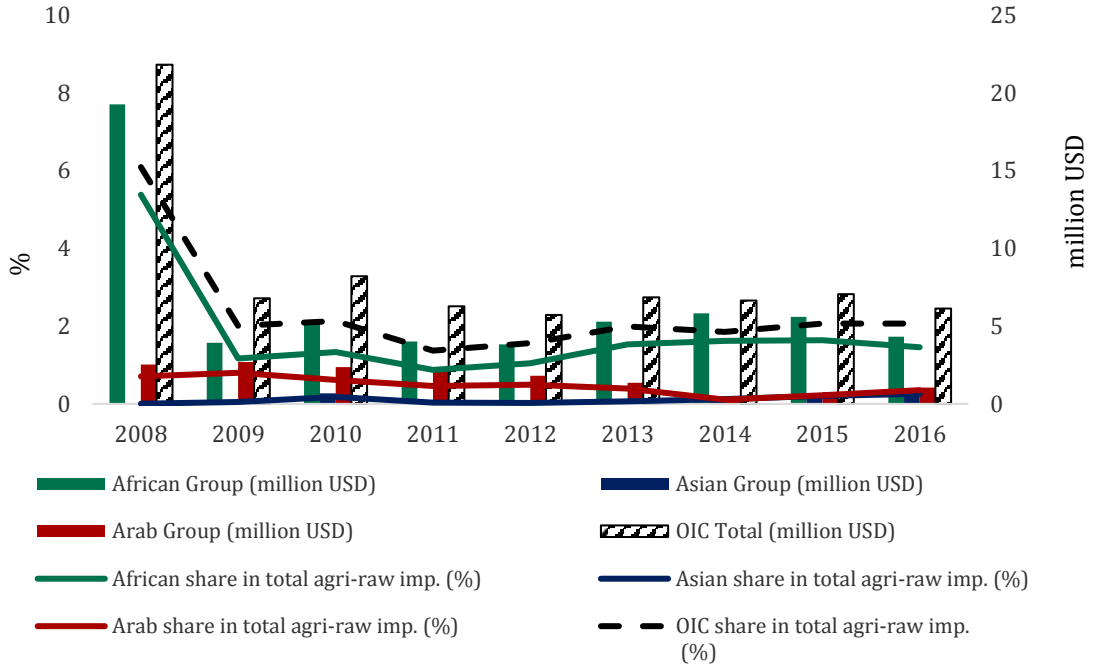
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

It has been shown in Figure 4.21 that the total share of OIC country groups in Morocco's agricultural raw material exports decreased from 2008 to 2016. Exhibiting notable fluctuations within the range of 0% and 21.4%, Asian group's share is 1.8% in 2016. Arab and African groups both exhibited decreasing shares in exports, with the share of Arab group decreasing from 2.2% to 1.2%, and the share of African group decreasing from 4.9% to 0.3% from 2008 to 2016.

The decline in the total share of OIC country groups in Morocco's agricultural raw material imports has been shown in Figure 4.18. African group has the largest share of the three groups, but their share decreased from 5.4% to 1.5% from 2008 to 2016. Arab and Asian groups account for a very small part of agricultural raw material exports.

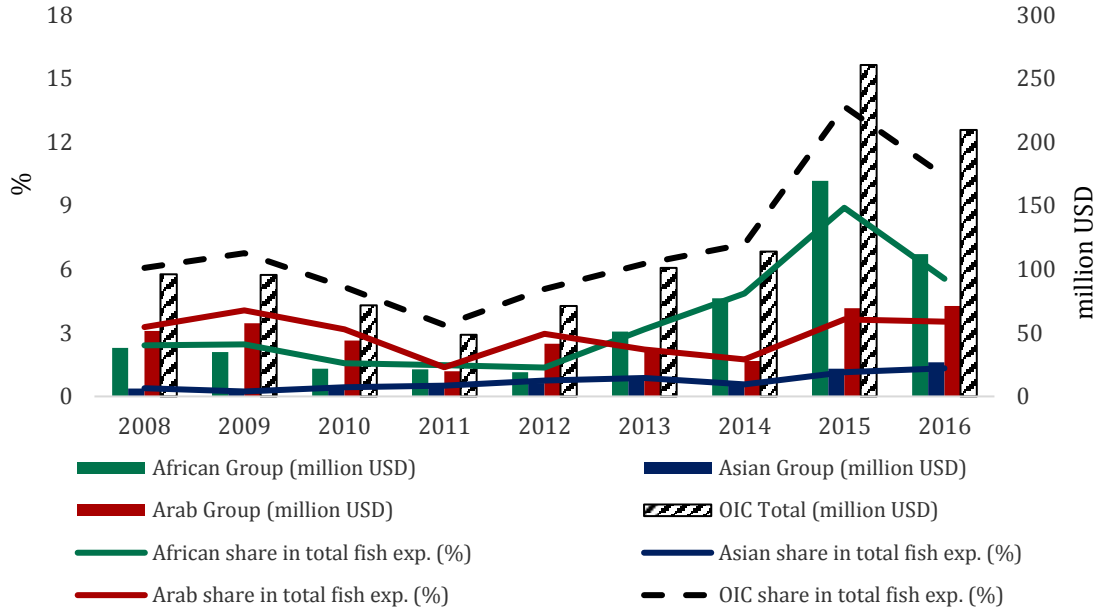
It has been illustrated in Figure 4.23 that African group has the highest share in Morocco's fish exports, followed by Arab group and Asian group. African group's share increased from 2.4% to 5.5% during the 2008-2016 period. Arab group's share of fish exports of Morocco moved within the range of 1.4% and 4.1% during the same period. Accounting for a small part of fish exports, Asian group's share increased from 0.4% to 1.3% from 2008 to 2016.

Figure 4. 22 Imports of Morocco's Agricultural Raw Materials from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

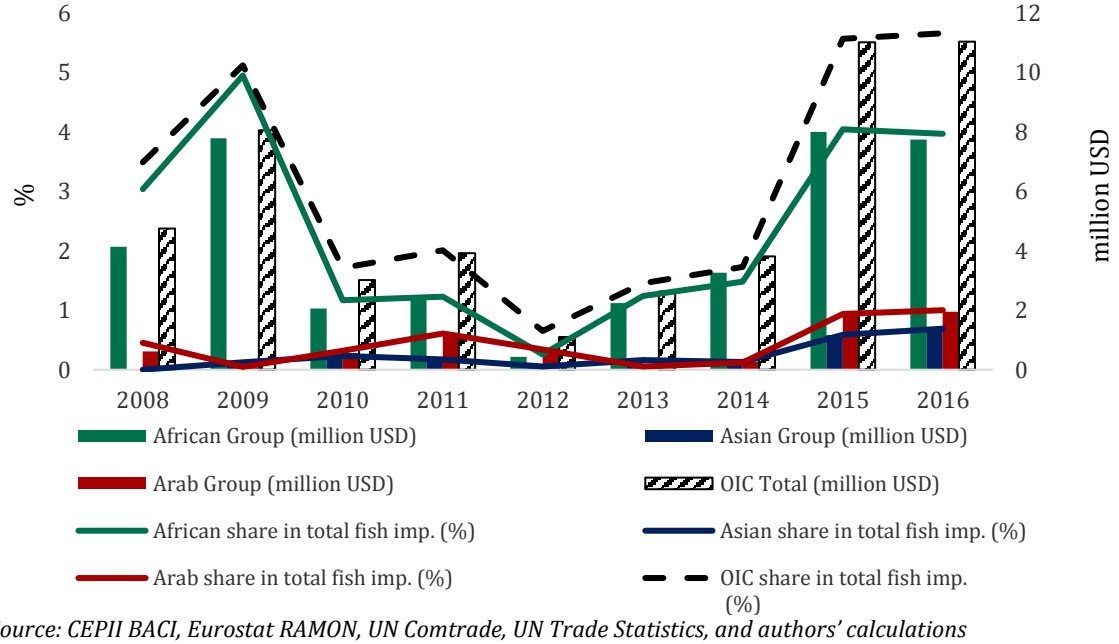
Figure 4. 23 Exports of Morocco's Fish Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

It has been shown in Figure 4.24 that African group has the largest share in fish imports of Morocco, followed by Arab group and Asian group. After a decline to 0.3% in 2012 from 3% in 2008, the share of African group increased to 4% in 2016. Arab and Asian groups constitute a relatively small part of fish imports; however, shares of both groups slightly increased during the 2008-2016 period.

Figure 4. 24 Imports of Morocco's Fish Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

In summary,

- Arab group has the highest share in Morocco's agri-food exports with a share of 10.8% in 2016, followed by Asian group and African group with respective shares 2.8% and 2.5%.
- Arab group has the highest share in Morocco's agri-food imports with a share of 5.4% in 2016, followed by Asian group and African group with respective shares 2.7% and 1.7%.
- Asian group has the highest share in Morocco's agricultural raw material exports with a share of 1.8% in 2016, followed by Arab group and African group with respective shares 1.2% and 0.3%.
- African group has the highest share in Morocco's agricultural raw material imports with a share of 1.5% in 2016, followed by Arab group and Asian group with their respective shares 0.4% and 0.3%.
- African group has the highest share in Morocco's fish exports with a share of 5.5% in 2016, followed by Arab group and Asian group with their respective shares 3.5% and 1.3%.
- African group has the highest share in Morocco's fish exports with a share of 4% in 2016, followed by Arab group and Asian group with their respective shares 1% and 0.7%.

Top 5 Agricultural export and import products of Morocco in the OIC Markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Morocco's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

03: Fish
02: Dairy
05: Vegetables, fruit
08: Feeding stuff for animals
06: Sugars

with percentage shares of 28.6%, 14.1%, 12.4%, 11.5%, and 8.6%, respectively.

With regards to Morocco's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Morocco's total agricultural imports from the OIC countries are (top 5 agricultural import products to the OIC):

05: Vegetables, fruit
41-42-43: Oils, fats, waxe
07: Coffee, tea, cocoa, spices
08: Feeding stuff for animals
11-12: Beverages, tobacco

with percentage shares of 27.8%, 18.7%, 17.6%, 14.4%, and 4.8%, respectively.

The products in the two lists are not mutually exclusive. "Vegetables and fruit", and "feeding stuff for animals" are products that are both commonly exported to and imported from OIC countries. The reason may be that the combinations of the product groups according to higher digits are different and that export products and import products at higher digit SITC levels are different.

Table 4. 17 Distribution of Morocco's Top 5 Export Products, by Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	1.3	0.3	3.3	95.1	100
2009	1.3	0.2	4.1	94.4	100
2010	1.0	0.6	3.7	94.8	100
2011	0.8	0.4	2.5	96.2	100
2012	1.0	0.5	3.5	94.9	100
2013	1.8	1.2	3.1	93.9	100
2014	2.4	1.5	2.9	93.2	100
2015	4.4	1.9	6.0	87.7	100
2016	3.4	2.4	6.2	87.9	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The distribution of Morocco's top 5 agricultural exports to the OIC according to destination has been shown in Table 4.17. The share of non-OIC countries in total OIC exports of top five agricultural export products has declined from 95.1% to 87.9% from 2008 to 2016. During the observation period, all country groups exhibited increases in shares of total exports at the expense of non-OIC countries, with Arab group's share increasing from 3.3% to 6.2%, followed by African group and Asian group with their respective increases from 1.3% to 3.4% and 0.3% to 2.4%.

Table 4. 18 Distribution of Morocco's Top 5 Import Products, by Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.5	0.6	11.5	87.4	100
2009	1.2	0.8	9.8	88.1	100
2010	0.6	0.3	8.5	90.5	100
2011	0.7	0.6	7.5	91.2	100
2012	0.3	0.2	7.9	91.5	100
2013	1.3	0.4	9.3	89.1	100
2014	1.4	0.4	8.1	90.2	100
2015	2.1	0.5	11.8	85.6	100
2016	2.5	0.5	10.5	86.5	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The distribution of Morocco's top 5 import products from OIC countries according to the region of origin has been shown in Table 4.18. The share of non-OIC countries did not change much during the 2008-2016 period. As of 2016, Arab group accounts for the major share in total OIC imports, despite exhibiting a slight decrease from 11.5% in 2008 to 10.5% in 2016. During the same period, Asian group's share remained relatively stable, while African group's share slightly increased from 0.5% to 2.5%.

It has been shown in Table 4.19 that Turkey is the largest importer of Morocco's top five agricultural export products in the OIC market. The share of Turkey in the last available three-year average is 16.9%, followed by Lebanon, Côte d'Ivoire and Mauritania with their respective shares of 8.7, 8.2, and 6.7. The higher shares are due to the geographic proximity of these three countries to Morocco. The fifth largest market is Syria, for which the lower share can again be associated with the ongoing conditions.

Table 4. 19 Top 5 OIC Destination Countries for Morocco's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, million USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Turkey	86.6	16.9
Lebanon	44.5	8.7
Côte d'Ivoire	42.2	8.2
Mauritania	34.5	6.7
Syria	24.9	4.9

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The first 5 markets from which Morocco purchases the highest agricultural imports in the OIC market has been shown in Table 4.20. Egypt is the largest market for Morocco's top 5 agricultural product imports from OIC countries with a share of 29.7%, followed by Tunisia with a share of 13%. Both Egypt and Tunisia are geographically close markets to Morocco, which explain their higher shares. The third largest market is Indonesia, followed by UAE and Turkey.

Table 4. 20 Top 5 OIC Origin Countries of Morocco's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, million USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Egypt	96.6	29.7
Tunisia	42.1	13.0
Indonesia	38.9	12.0
UAE	33.5	10.3
Turkey	23.6	7.3

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

4.2.2. Agricultural Trade Policies in Morocco

Background

From independence in 1956 to the late 1980s, the agricultural sector in Morocco was subject to heavy state intervention. The direct and indirect involvement of the state was particularly visible in marketing and international trade. Imports of cereals and exports were under the control of state-run offices. Production was pursued largely by the private sector, but the production decisions are coordinated by the state as well. The stability of domestic prices of certain strategic products and increasing agricultural productivity were among the main motivations of state interventions.

Liberalizing agriculture, rationalizing state intervention in agriculture, and liberalized agricultural trade policy were among the main purposes of the reform initiated in 1983. In the following years, export taxes on agricultural products were reduced to zero. Tariffs on average were decreased substantially, but the state monopolies' role on importing was preserved.

In the early 1990s, reform and liberalization efforts by the Moroccan authorities were continued, and Marrakech was chosen as the ceremony site of the 1994 GATT agreement. Morocco is a member of the WTO since 1995.

Table 4. 21 OIC Member Countries that Export to Morocco under Preferential Tariffs

African Group	Arab Group	Asian Group
Benin	Comoros	Afghanistan
Burkina Faso	Djibouti	Albania
Chad	***Egypt****	Bangladesh
Côte d'Ivoire	***Jordan***	Indonesia*
Gambia	Mauritania	Iran
Guinea	Palestine	Kyrgyzstan
Guinea-Bissau	Somalia	Malaysia
Mali	***Sudan***	Pakistan
Mozambique	***Tunisia****	Tajikistan
Niger	***Yemen***	Uzbekistan
Nigeria		
Senegal		
Sierra Leone		
Togo		
Uganda		

Source: WTO RTA Database.
Note: Countries marked with an asterisk are among the top 5 OIC countries from which Morocco's top import products are imported. Countries written in boldface letters have a free trade agreement in force with Morocco.

Tariffs

The most recent WTO Tariff Profile Summary for Morocco indicates that the simple average MFN applied tariff for agriculture in Morocco is 27.6% in 2017 and the trade-weighted average in 2016 is 16.2%. The usual case of tariffs in agriculture being larger than tariffs in non-agricultural sectors is also observed for Morocco. The wedge for the trade-weighted 2016 average is close two times.

The distribution of applied MFN tariffs in agriculture indicates that, in 2017, less than 7% of all tariff lines have tariff rates larger than 50% and around 50% of all tariff lines have rates less than 25%.

Looking at the product line classifications shared in the WTO Tariff Profile summary, applied MFN rates remain at 2-digit numbers. From the largest to the smallest, the five highest rates are the following: 69.8% for animal products, 50.9% for dairy products, 36.2% for beverages and tobacco, 26.2% for fruits, vegetables, and plants, and 21.7% for cereals and preparations.

Applied average MFN tariffs are typically larger than the EU levels in the product line classifications of the WTO Tariff Profile Summary. The exception here is "Sugars and confectionary" as the Moroccan MFN applied rate of 20.2% is around 3 percentage points lower than the EU rate.

Morocco applies preferential tariffs to a diverse set of countries, and Table 4.21 lists 35 OIC member countries that export to Morocco under preferential tariffs.

Table 4. 22 Tariffs Set by Morocco for Top 5 Import Products from the OIC Exporters, %

	05: Vegetables, fruit	41-42-43: Oils, fats, waxe	07: Coffee, tea, cocoa, spices	08: Feeding stuff for animals	11-12: Beverages, tobacco
2014	0.8	4.5	6.9	-	22.8
2015	0.3	4.7	7.9	-	23.8
2016	0.7	3.0	6.7	-	23.7

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

The available data with regards to tariff rates for top five import products from the top 5 OIC exporters has been presented in Table 4.22. The tariff rate of beverages and tobacco is large and very slightly increased over the last three years, while the tariff rate for coffee, oils, and vegetables and fruit decreased during the same period.

Table 4. 23 Tariffs Set by OIC Countries for Morocco's Top 5 Export Products, %

	03: Fish	02: Dairy	05: Vegetables, fruit	08: Feeding stuff for animals	06: Sugars
2016	21.2	3.9	8.2	2.6	81.7

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

The tariff rates for Morocco's top five export products is shown in Table 4.23. The 2016 tariff rates demonstrate that tariff rates for sugars are the highest, followed by fish, vegetables and fruit, dairy, and feeding stuff for animals.

NTMs

Tables 4.24 and 4.25 summarize the role of NTMs in Morocco's agricultural trade. In the former table, NTM types and product shares and counts affected from NTMs are shown. Food products and vegetable are the main product categories that are being affected from the existence of NTMs.

On the other hand, Tables 4.25 indicates that SPS and TBT measures are particularly dominant for Animals and Vegetable as expected.

Trade agreements and cooperation

Morocco is among the OIC countries that have submitted their updated list of concessions for the Trade Preferential System within the OIC (TPS-OIC).

Morocco has FTAs with a large number of OIC and non-OIC countries. The major non-OIC countries and regions in this regard are the USA (since 2006) and the EU (since 2000). The OIC member countries with whom Morocco has an FTA currently "in force" are Libya, Jordan, Kuwait, Lebanon, Iraq, Saudi Arabia, Syria, Oman, United Arab Emirates, Tunisia, Sudan, Qatar, Bahrain, Yemen and Egypt under the Pan-Arab Free Trade Area (PAFTA) since 2000, Egypt, Jordan and Tunisia under the Agadir Agreement since 2007, and, finally, Turkey since 2006. Other than the Agadir Agreement, these FTAs have been notified under the GATT Art. XXIV.

Morocco has a PSA, i.e., the Global System of Trade Preferences among Developing Countries (GSTP), along with 41 countries across the globe since 1989. The OIC members of GSTP other

than Morocco are Algeria, Bangladesh, Benin, Cameroon, Egypt, Guinea, Guyana, Indonesia, Iran, Iraq, Libya, Malaysia, Mozambique, Nigeria, Pakistan, Sudan, and Tunisia.

Table 4. 24 NTM Types and NTM Affected Products, Morocco

Sector	NTM Type	Share %	Count
Animal	1 type	9.5	32
Animal	2 types	22.3	75
Animal	3+ types	36.6	123
Animal	No NTMs	31.6	106
Vegetable	1 type	2.6	9
Vegetable	2 types	8.0	28
Vegetable	3+ types	81.2	286
Vegetable	No NTMs	8.2	29
Food Products	1 type	7.1	15
Food Products	2 types	23.2	49
Food Products	3+ types	62.1	131
Food Products	No NTMs	7.6	16
Hides and Skins	1 type	15.9	11
Hides and Skins	2 types	68.1	47
Hides and Skins	3+ types	1.2	1
Hides and Skins	No NTMs	14.5	10
Wood	1 type	0.4	1
Wood	3+ types	38.7	91
Wood	No NTMs	60.9	143

Source: WITS

Morocco is a member of the Mediterranean Agriculture Market Information Network (MED-AMIN) launched in February 2014. Other OIC members of MED-AMIN are Albania, Algeria, Egypt, Lebanon, Tunisia, and Turkey.

4.2.3. Stakeholders' Perceptions in Morocco

As in the case of Turkey, the two ministries responsible for agriculture and trade are major actors in developing and coordinating agricultural trade policies. Thus, the directors and experts from the Ministry of Agriculture, Fisheries, Rural Development, Water and Forests and from the Department of Foreign Trade in the Ministry of Industry, Investment, Trade and Digital Economy are included in the list of interviewees. The key informant interview has also been conducted with academics working on agriculture and agricultural trade, the experts from the Islamic Center of Development and Trade and from the OCP Policy Center, and the Chamber of Agriculture in Casablanca and Settat.

Table 4. 25 NTM Coverage and Frequency Ratios in Agricultural Products, Morocco

Code	Sector	CR	FR	Count
A	Animal	100.0	100.0	204
B	Animal	97.6	94.6	193
F	Animal	0.8	1.5	3
P	Animal	100.0	100.0	151
A	Vegetable	100.0	100.0	317
B	Vegetable	97.3	93.4	296
C	Vegetable	82.7	86.8	275
F	Vegetable	82.7	86.8	275
G	Vegetable	55.2	12.3	39
P	Vegetable	98.4	95.7	225
A	Food Products	65.9	92.4	183
B	Food Products	67.9	90.9	180
C	Food Products	11.0	35.9	71
F	Food Products	24.2	49.5	98
P	Food Products	87.3	76.6	121
A	Hides and Skins	100.0	100.0	59
B	Hides and Skins	13.2	1.7	1
P	Hides and Skins	100.0	100.0	48
A	Wood	36.1	40.4	91
B	Wood	5.2	4.4	10
C	Wood	36.1	40.4	91
F	Wood	36.1	40.4	91
P	Wood	27.9	40.1	65

Source: WITS
Note: A: Sanitary and phytosanitary measures, B: Technical barriers to trade, C: Pre-shipment inspection and other formalities, F: Charges, taxes and other para-tariff measures, G: Finance Measures, P: Export related measures

Agricultural trade policies

Agriculture is seen as a crucial aspect of life in Morocco with important political and social dimensions. The two main purposes of agricultural trade policies are the following: First, ensuring a minimum level of production in agricultural products is a critical objective regarding food security, sufficiency and sustainability. Second, protecting the revenue in rural areas and especially in arid areas and alleviating rural poverty are seen as essential aspects of policy making.

Trade liberalization of the past decades through tariff reductions is an important leg of agricultural trade policy in Morocco. But it should also be added that Morocco's trade regime remains protective in certain strategic products such as cereals, red meat, and livestock. In some cereals, quotas are exercised in certain product lines with sufficiently low tariff rates. In red meat, on the other hand, the main purpose behind prohibitively large tariff rates is to alleviate poverty risks in arid areas. Morocco has largely adopted the US and EU standards in SPS

measures, but the existence of modern SPS measures is not perceived as trade protection since health and safety are of prime importance in Morocco.

The 2013 tariff reform has been implemented mainly for alleviating the supply chain problems in agriculture. The reform has come with major reductions, letting the tariff rates on imported agricultural inputs decrease to 2.5%. More generally, average tariffs are notably low for agricultural machinery and agricultural raw materials. While this contributes to lower input costs in the agricultural sector, it also may act as a barrier against technological progress in agriculture.

Food security, supply chains, and smallholder farmers

The major reform initiative in Morocco since 2008 is the Green Morocco Plan (GMP). Reformed in 2013, the GMP has many facets, e.g. distributing lands, restructuring of farmers into cooperatives, and irrigation projects. There also exists a financial credit branch of the plan that is administrated by the state-owned bank Crédit Agricole du Maroc. The Hassan II Institute of Agronomy and Veterinary Medicine, vocational training centers, and institutions working on the management of water resources are other key institutional actors for the GMP. Under the GMP, there are also federations and offices each specializing in a particular agricultural product.

An innovative aspect of the GMP is known as the aggregation through which big agricultural producers provide help and guidance to smallholder farmers in production, marketing, and exporting. The main purpose is to let the smallholders increase the volume of their production and the quality of their products, thereby achieve a product quality level that is in accordance with the modern SPS measures faced in global markets. A very recent initiative called the solidarity market, on the other hand, aims to create a direct/short circuit between producers and consumers. Its scope, however, is currently restricted to some regions and some products.

The problem of fragmented lands stands out as one of the most important problems in the implementation of the GMP. Most agricultural farmers resort to establishing family businesses instead of pursuing entrepreneurship or forming cooperatives. This is a factor that may limit the scope of modernization in agriculture. Another problem is the tendency of young people to not to work in agriculture. The rural-to-urban migration associated with this is a plausible factor that decreases the supply of entrepreneurship in agriculture and that contributes to the youth unemployment in urban areas.

There are particular success stories in Moroccan agricultural trade as well. The cooperative called COPAG is one such initiative that proves the importance of aggregation. Established by 39 small citrus producers initially in 1987, COPAG is now a major producer of meat, milk products, and fruits and vegetables and an exporter of fresh fruits and vegetables after three decades of reforms in processing and automation.

Despite successes in certain regions, irrigation problems still affect the standard of living for a sizable portion of rural population and act as a barrier against agricultural exports. In regions where irrigation projects have been successful, producers have become major exporters to the EU. But projects have not resolved the problems of irrigation in all regions. In terms of rural poverty, the livestock producers remain one of the most disadvantaged groups in Morocco.

OIC-Morocco agricultural trade relations and intra-OIC agricultural trade

The OIC as a whole is not self-sufficient in certain products such as cereals, meat, and dairy products but self-sufficient in some other products such as oils (e.g. palm oil) and fruits. Therefore, promoting intra-OIC agricultural trade emerges as an important agricultural trade policy objective. The OIC member countries should envision and take action for being partners in agricultural trade, not competitors. In some agricultural products, the OIC countries are price competitors against some non-OIC importers.

In contrast to the past decades, Morocco is now much more open to Sub-Saharan Africa in terms of agricultural trade. There exist partnerships in the areas of fertilizers and phosphate, and this may even open new doors in trade and cooperation. Morocco also offers scholarships and training to African students, and Moroccan commercial banks are highly active in certain African countries.

Food safety reasons and logistic problems are among the main constraints that adversely affect the agricultural trade with the OIC member countries in Sub-Saharan Africa. There exists a good potential of live animals to be imported from Niger and Somalia, for instance. But health concerns and the lack of economic transportation opportunities remain as two binding constraints. Transportation is a particularly strong barrier that implies large freight costs for the landlocked countries in Sub-Saharan Africa.

Climatic conditions, and especially the drought years, differ across the OIC countries located in North Africa. Thus, coordinating the production support and trade policy decisions elastically to ensure a minimum level of food consumption in these countries is seen as an opportunity for food security.

Fish and fish products are seen as key agricultural products regarding the Morocco-OIC agricultural trade relationships. Morocco has a great potential to supply fish products to the OIC but the trade flow should reach a critical mass.

4.3. The Gambia

The Gambia, officially known as the Republic of the Gambia, is located in Western Africa and surrounded by Senegal, with only 60 kilometers of coastline on the Atlantic Ocean. The country is essentially a 480 km long narrow strip of land. The Gambia is one of the smallest West African countries with a predominantly drought Shelia shrub-land ecology. Around 56% of the country's total land is suitable for agricultural production. The land is mostly used for cereal and groundnut production as well as for grazing and fallow. Endowed with considerable water resources, the Gambia is considered as one of world's richest fishing zones. The Gambian river is 480 km in length, and bisects the country into two sections (The Republic of the Gambia, 2017).

The country's GDP is 1.01 billion USD at the 2017 official exchange rate and per capita gross national income of 450 USD in 2017 (Word Bank, 2018a). The Gambia ranks 176th in GDP and 62th in real growth rate among a total of 230 countries. The country is considered to be one of the poorest in the world. The Gambia ranks as 174 out of 189 countries across the globe with regards to human development index (HDI) (UNDP, 2018). 39% of the population live in extreme poverty and mostly depend on agriculture. There is rising inequality, particularly in the rural areas as well as increased poverty among female households.

Table 4. 26 Share of Agriculture in GDP, Employment and Trade, Gambia

Year	% share in GDP	% share in employment	% share in exports	% share in imports
2008	25.2	32.6	51.0	28.1
2009	26.2	32.6	69.2	34.2
2010	29.0	32.8	68.5	36.1
2011	18.9	31.3	62.9	37.2
2012	20.3	30.5	57.1	37.0
2013	18.9	29.8	55.0	37.6
2014	17.4	28.7	55.4	37.1
2015	17.3	28.4	92.0	35.2
2016	17.0	27.2	83.1	32.7

Source: CEPII BACI, Eurostat RAMON, World Bank, UN Comtrade, UN Trade Statistics, and authors' calculations

Malnutrition and food deficit as well as low production and low productivity in agricultural sector has been significant problems throughout the years. Absence of distribution of adequate water and use of traditionally low technologies in agricultural production augments low productivity, leading to a vicious circle of poverty and malnutrition. 71% of the population and 57.2% of the urban population lives under 1.25 USD/person/day. Poor infrastructure, lack of access to finance, marketing constraints, missing markets throughout the agricultural value chain are limiting factors for sound agribusiness development (African Development Bank, 2017).

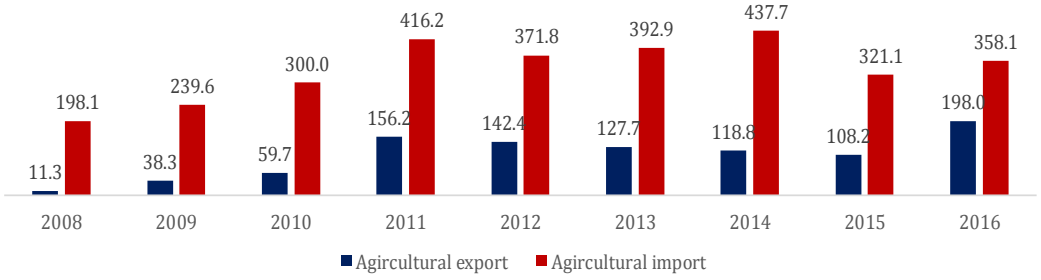
In the Gambia, the rate of economic growth was 6.5% in 2010 and 3.5% in 2017 and inflation rate was 7.0% in 2010 and 10.8 in 2017. The country's economy relies on services, particularly tourism. The sectoral distribution of GDP in 2017 is 20.4%, 14.2% and 65.4% for agriculture, industry and services, respectively (CIA, 2018).

Table 4.26 shows the relative importance of agriculture in the Gambia for the period between 2008 and 2016. The figures show that the share of agriculture in GDP and employment has declined during the 2008-2016 period while the share of agriculture in exports increased by

30%. The share of imports remained relatively same during the 2008-2016, with a slight increase.

Figure 4.25 presents agricultural exports and imports where import value is greater the value of exports, representing a trade deficit across the years.

Figure 4. 25 Agricultural Exports and Imports, Million USD, Gambia

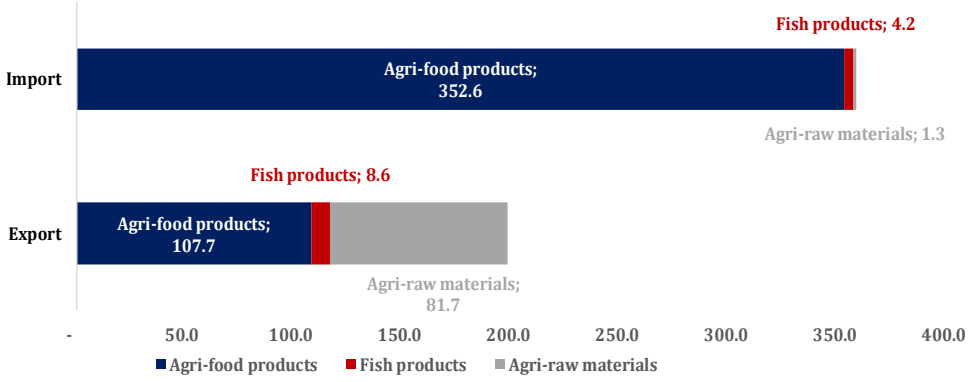


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Within subgroups of agricultural products,

- Exports of agri-food products were 107.7 million USD and imports of agri-food products were 352.6 million USD with a trade deficit of 244.9 million USD in 2016.
- Exports of agricultural raw materials were 81.7 million USD and imports of agricultural raw materials were 1.3 million USD with a trade surplus of 80.4 million USD in 2016.
- Exports of fish products were 8.6 million USD and imports of fish products were 4.2 million USD with a trade surplus of 4.4 million USD in 2016
- The Gambia is a large importer of agri-food products with a share of 98% in total imports in 2016 (see Figure 4.26).

Figure 4. 26 Agricultural Exports and Imports, Product Groups, Million USD, Gambia, 2016



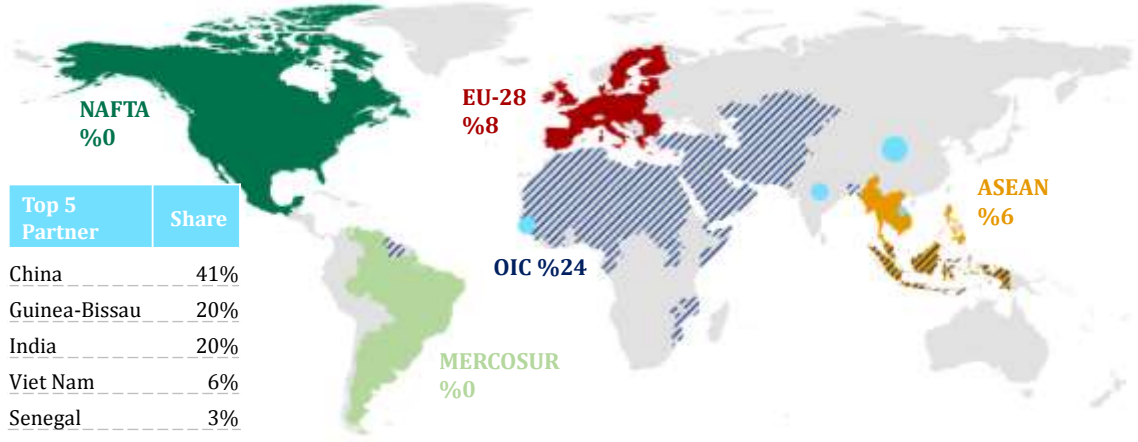
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Trade policies in Gambia in terms of preferential trade agreements have been influenced by Economic Community of West African States (ECOWAS) agreements. Most of the free trade agreements are developed in parallel to this trade bloc. Currently, Gambia is part of free trade agreements with 14 countries worldwide including 11 OIC member countries (Benin, Burkina

Faso, Cote d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo) (WTO, RTA-IS).

Figures 4.27 and 4.28 present breakdown of agricultural export destinations and import countries of origins of the Gambia. China is the top export partner for Gambian agricultural products. The share of OIC group in total agricultural exports is 24% and in agricultural imports is 33% in 2016. The Gambian top agricultural import partners are Brazil and Malaysia, followed by Indonesia, USA and the Netherlands.

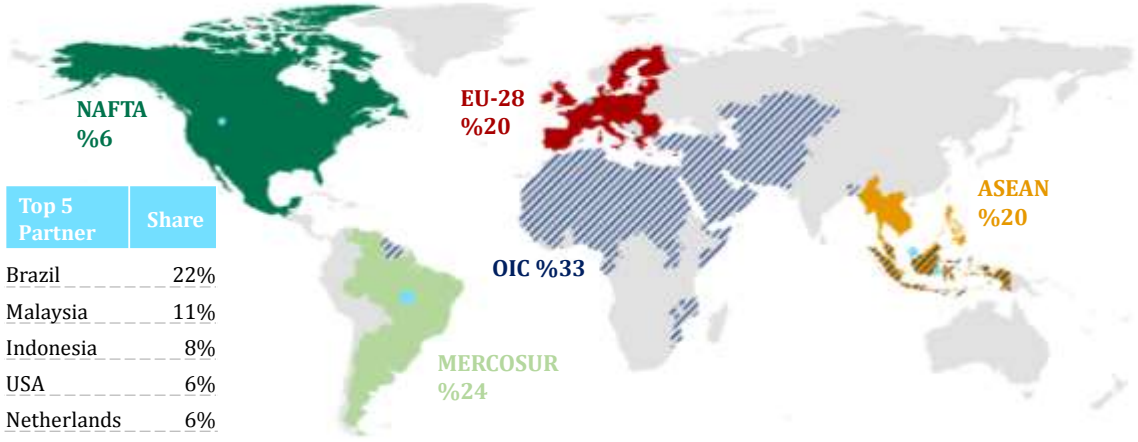
Figure 4. 27 Breakdown of Gambia's Agricultural Export Destinations, 2016



Top 5 Partner	Share
China	41%
Guinea-Bissau	20%
India	20%
Viet Nam	6%
Senegal	3%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 28 Breakdown of Gambia's Agricultural Import Origins, 2016



Top 5 Partner	Share
Brazil	22%
Malaysia	11%
Indonesia	8%
USA	6%
Netherlands	6%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

4.3.1. Agricultural Trade with the OIC Countries

General overview

As shown in Table 4.27, the share of OIC Countries in The Gambia's total agricultural exports have not been in stable percentages over the years. The share of OIC in Gambia's total agricultural exports varies from 0.3% to 31.2% with sharp discrepancies from one year to the next year. The share of OIC countries in Gambia's agricultural imports have been relatively

stable with around 1/3 of total agricultural imports originating from the OIC countries (Table 4.27). Although with fluctuations between 2008 and 2016, the share of OIC countries in Gambia's agricultural imports increased to 33.3% in 2016, from 26% in 2008.

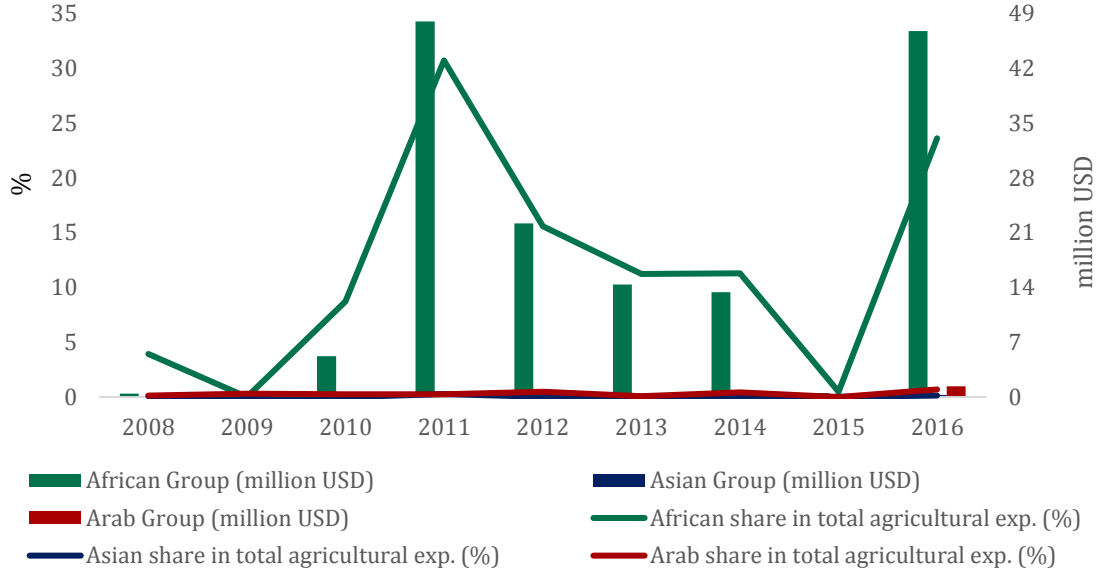
Table 4. 27 Value & Share of OIC in the Gambia's Agricultural Trade

Year	Value (exports) million USD	Share in Gambia's total agricultural exports, %	Value (imports) million USD	Share in Gambia's total agricultural imports, %
2008	0.5	4.1	51.4	26.0
2009	0.1	0.3	66.5	27.7
2010	5.3	9.0	102.5	34.2
2011	48.8	31.2	157.3	37.8
2012	22.9	16.1	150.2	40.4
2013	14.5	11.3	165.1	42.0
2014	14.0	11.8	159.4	36.4
2015	0.5	0.5	107.0	33.3
2016	48.4	24.4	119.3	33.3

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

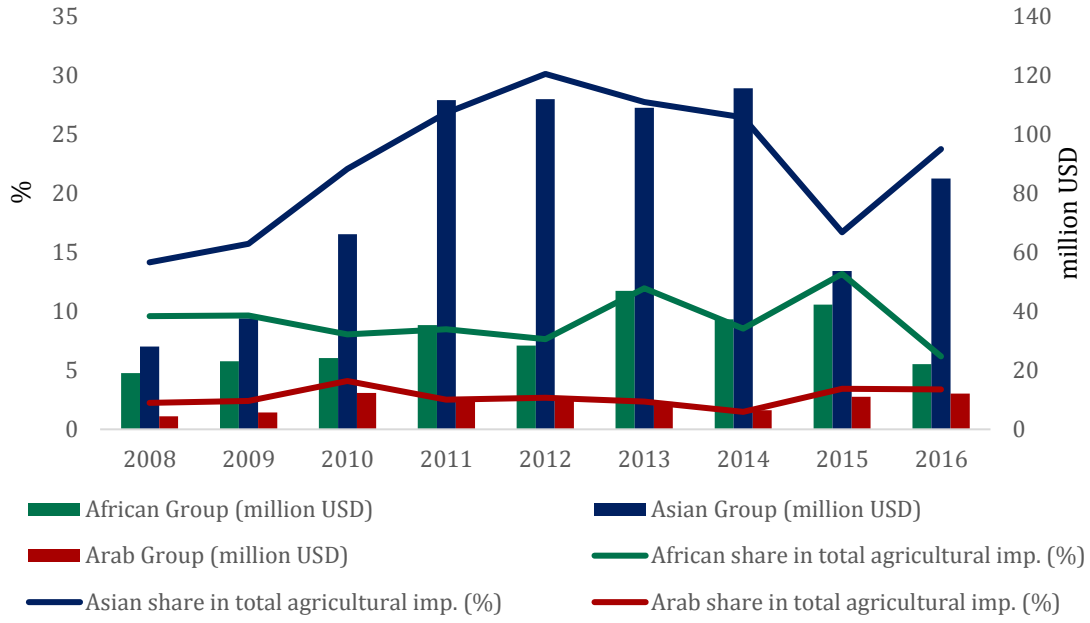
Looking at the distribution of the OIC groups, the African group countries are the major export partner of Gambia, far surpassing the share of the Asian and Arab group countries (Figure 4.29). The import share of the African group has been unstable within the total value of Gambian agricultural product imports. As seen in Figure 4.30, the share of the Asian group is largest among total exports of Gambian agricultural products, followed by the African group and the Arab group.

Figure 4. 29 Share of OIC Groups in Gambia's Agricultural Exports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

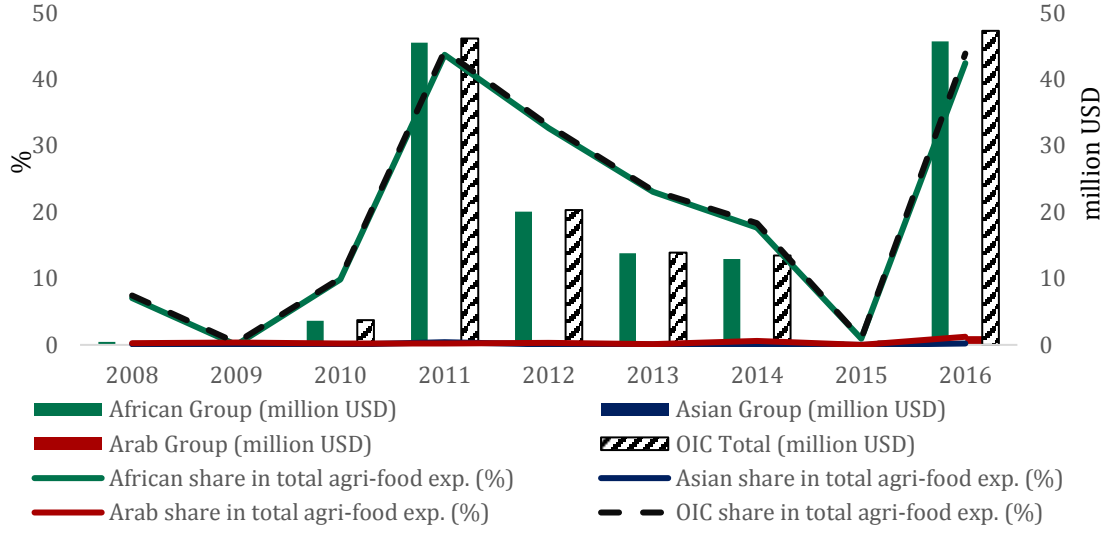
Figure 4. 30 Share of OIC Groups in Gambia's Agricultural Imports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.31 shows that the African group is the largest export partner of Gambia in agri-food product exports. Exports of the agri-food products to the African group constitutes almost all of the total Gambian exports of agri-food products to the OIC countries. The shares of the Arab and the Asian group in Gambia's total agri-food exports are in negligible values and percentages.

Figure 4. 31 Exports of Gambia's Agri-Food Products to the OIC Groups

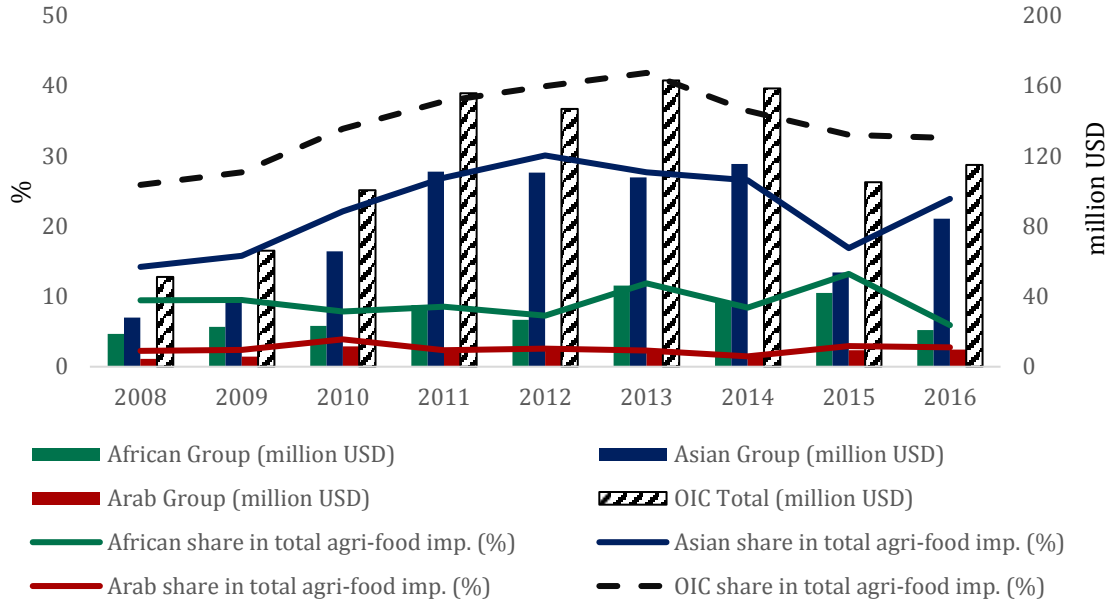


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

With regards to imports of agri-food products, the situation is quite different. Figure 4.32 shows that The share of OIC imports of agri-food products is within the range of 25.8 % and 41.8 %

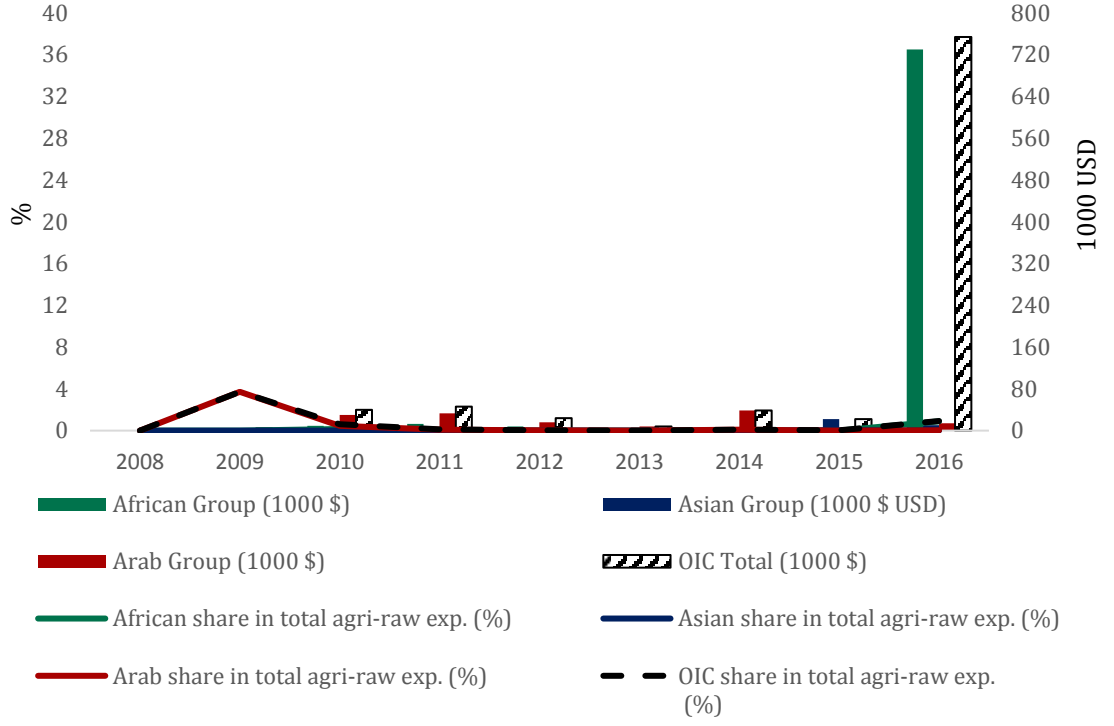
with the 2016 share of 32.5%. The Asian group's share in total agri food imports is largest followed by the African and the Arab group's shares.

Figure 4. 32 Imports of Gambia's Agri-Food Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

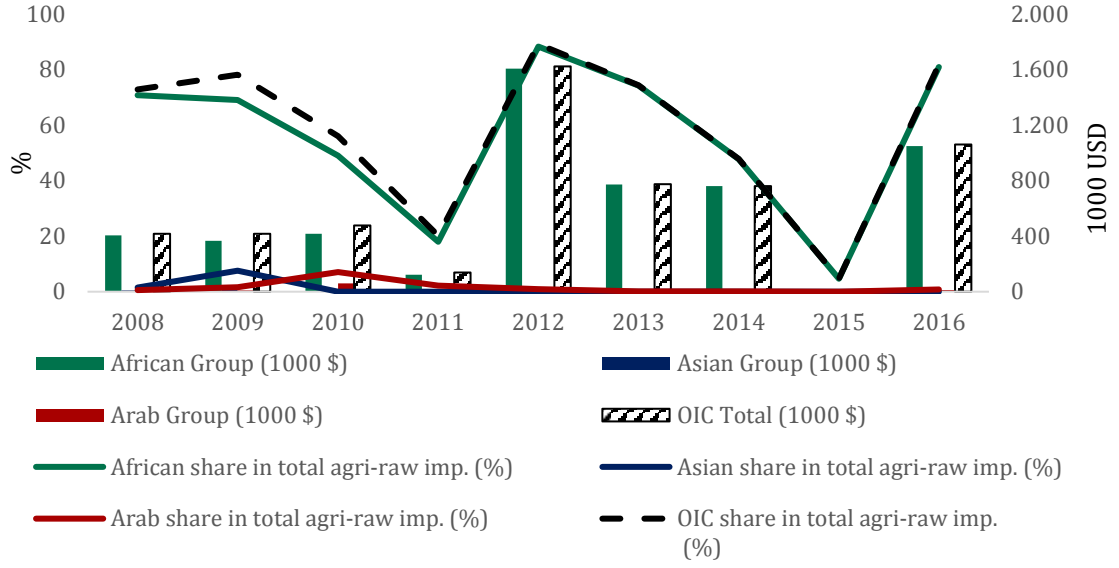
Figure 4. 33 Exports of Gambia's Agricultural Raw Materials to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.33 shows exports of agricultural raw materials of The Gambia. The graphs reveal that there has been relatively insignificant trade volume over the years, except for 2016 where there is a sharp increase in exports of agricultural raw materials to the African group.

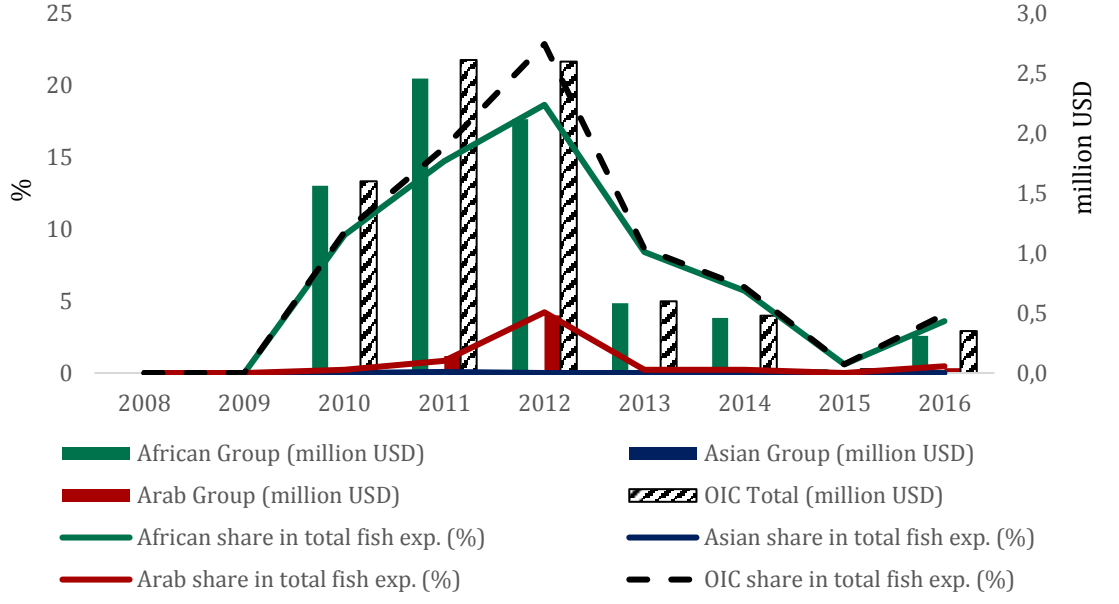
Figure 4. 34 Imports of Gambia's Agricultural Raw Materials from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

As seen in Figure 4.34, In agricultural raw material imports, African group is yet again the top trade partner, with fluctuating shares across the years.

Figure 4. 35 Exports of Gambia's Fish Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

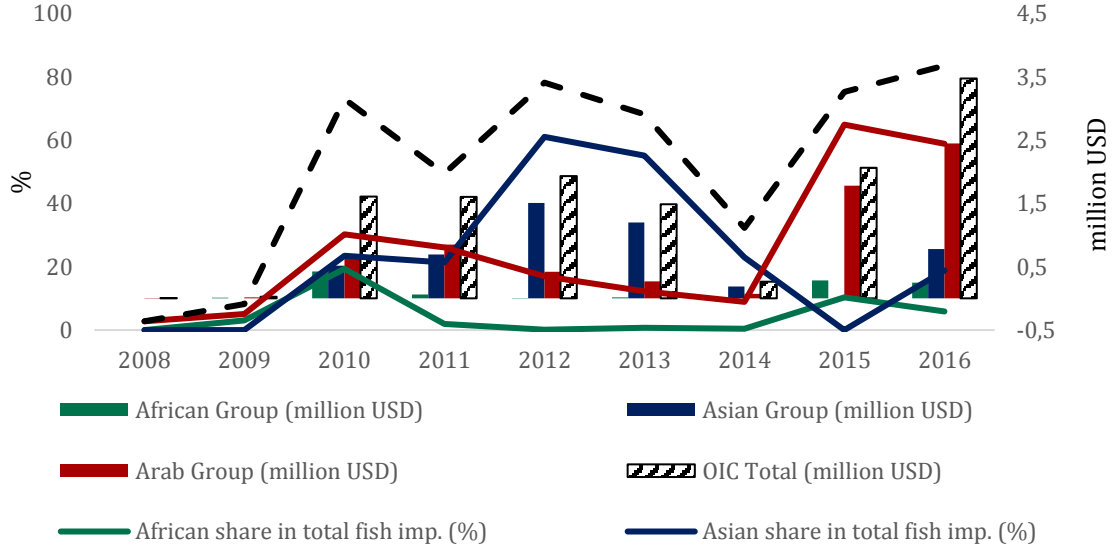
Fish is another important export and import item for the Gambia. Figure 4.35 demonstrates that African group is the top export partner for The Gambian fish trade, although with fluctuating

volumes. The share of Arab group increased slightly in 2012 but declined back to almost zero shares. Figure 4.36 demonstrates the fish imports of The Gambia from the OIC countries. The OIC share in total fish imports has increased over time, from 2.8% in 2008 to 83.5% in 2016. While the shares of the three country groups of the OIC was close in 2008, the share of the Asian group increased during the 2011-2013 period and then declined in 2014 at the expense of the imports of fish from the Arab group. The African group's share has been quite stable, but lower than the Asian and Arab group's share.

In summary,

- The share of the OIC countries in The Gambia's total agricultural exports is extremely fluctuating. There is no stability across the years.
- The OIC group's share in The Gambia's agricultural imports is relatively stable, constituting around 1/3 of the total.
- Almost entire agri-food exports of The Gambia to the OIC group is directed towards the African group countries.
- The principal origin of The Gambia's imports of agri-food products is the Asian group, followed by the African group.
- The share of the OIC group in agri-raw material exports of The Gambia is very small with the exception of 2016 with a large increase of exports to the African group countries.
- The share of the African group in The Gambia's OIC imports of agri-raw materials is largest across the years.
- The Gambian fish exports to the OIC countries do not show a stable pattern, majority of fish exports going to the African markets.
- Imports of fish from the OIC countries increased (with fluctuations) over time. The share of the Arab group in fish imports increased at the expense of the Asian group in fish in The Gambia's imports of fish from the OIC countries.

Figure 4. 36 Imports of Gambia's Fish Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Top 5 Agricultural export and import products of The Gambia in the OIC Markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Gambia's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

09: Miscellaneous p.
41-42-43: Oils, fats, waxes
08: Feeding stuff for animals
02: Dairy
11-12: Beverages, tobacco

with percentage shares of 19.4%, 15.5%, 11.3%, 9.6%, and 8.5%, respectively.

With regards to Gambia's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Gambia's total agricultural imports from the OIC countries are (top 5 agricultural import products from the OIC):

41-42-43: Oils, fats, waxes
09: Miscellaneous p.
04: Cereals
02: Dairy
07: Coffee, tea, cocoa, spices

with percentage shares of 38.5%, 22.0%, 16.5%, 5.9%, and 4.5%, respectively.

The products in the two lists are not mutually exclusive. "Oils, fats, waxes", "miscellaneous products" and "dairy" are products that are both commonly exported to and imported from OIC countries. The reason may be that the combinations of the product groups according to higher digits are different and that export products and import products at higher digit SITC levels are different.

Table 4.28 shows that non-OIC countries generally have had a large share in The Gambian exports of top 5 export agricultural products. The share declined over the years, yet with large fluctuations. The share of the Asian group and the Arab group is minimum. The African group's share changes across the years without showing a stable increase. However, despite instability in shares, it is possible to say that the share of non-OIC countries in export of top agricultural products decreased in favor of the exports to the African group countries.

Table 4. 28 Distribution of Gambia's Top 5 Export Products, by Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	16.2		0.6	83.2	100
2009			0.5	99.5	100
2010	14.3		0.1	85.6	100
2011	39.2		0.2	60.5	100
2012	55.2	0.0	0.4	44.3	100
2013	81.7			18.3	100
2014	59.5	0.4	1.8	38.3	100
2015	6.0			94.0	100
2016	76.1	0.7	4.3	19.0	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.29 shows that the share of the non-OIC countries of The Gambia's top 5 agricultural import products have declined while the share of the Asian group increased. The share of the African group increased as well but with fluctuations.

Table 4. 29 Distribution of Gambia's Top 5 Import Products, by Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	18.9	6.7	4.6	69.8	100
2009	15.7	30.8	2.9	50.6	100
2010	13.1	36.1	4.4	46.4	100
2011	13.7	43.9	2.5	39.9	100
2012	10.5	49.1	2.8	37.6	100
2013	17.9	40.5	2.8	38.9	100
2014	13.1	48.4	1.6	36.9	100
2015	25.5	28.1	4.0	42.4	100
2016	8.5	43.3	2.9	45.3	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The top 5 countries for which The Gambia's top 5 export products are sold are, Guine-Bissau, followed by Senegal and Mali. These three countries are geographically located very close to The Gambia, creating a favorable condition for transportation of export products. Similarly, the other top export partners, Tunisia and Mauritania are geographically located in the close neighborhood of The Gambia.

Table 4. 30 Top 5 OIC Destination Countries for Gambia's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, million USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Guinea-Bissau	6.2	53.6
Senegal	3.5	30.1
Mali	1.0	9.0
Tunisia	0.3	2.3
Mauritania	0.3	2.2

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4. 31 Top 5 OIC Origin Countries for Gambia's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, million USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Malaysia	38.3	33.9
Indonesia	24.5	21.7
Senegal	23.4	20.7
Pakistan	11.8	10.5
Turkey	6.1	5.4

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

With regards to imports of top 5 agricultural products, Malaysia and Indonesia are importers from far-away countries (Asian group). With the exception of Senegal, the other 4 countries of The Gambia's imports are located outside the African group.

4.3.2. Agricultural Trade Policies in the Gambia

Background

The Gambia has an open trade and investment regime since the Trade Policy Regime in 2010. The main trade policy reform has been the adoption of the ECOWAS Common External Tariff (CET) from January 1, 2017 (WTO, 2017a).

The sub-sectoral policies of agricultural production, marketing and trade along with institutional arrangements and creation of agricultural strategy documents dates back to the colonial efforts of the late 1940s. Since then, many policy documents were created in order to implement and create a productive agricultural sector in The Gambia. The Government of The Gambia, in parallel to vision 2020 that was developed in 1996 created agricultural position papers and strategy documents, most of which ended in 2016. The Gambia incorporated the Vision 2020 in 1996 to guide the country towards the goal of a middle income, export oriented country. The 1996 National vision defined the long-term objectives and adopted Bretton-Woods institutions sponsored Poverty Reduction Strategy Paper (PRSP) in place of its Strategy for Poverty Alleviation (SPA) (The Republic of the Gambia, 2017).

Since then, The Government of The Gambia created major policy papers, including Agriculture and Natural Resource Policy (ANRP) (2009-2015), The Gambia National Agricultural Investment Program (GNAIP) (2011-2015), Ministry of Agriculture Strategic Plan (MoASP) (2010-2014), Programme for Accelerated Growth and Employment (PAGE) (2012-2016) (African Development Bank, 2017).

The policies above are now replaced by new ones covering the period 2017-2025 under the National Development Plan (NDP) currently led by the Ministry of Finance. The Agricultural and Natural Resources (ANR) Policy (2017-2026) of The Republic of The Gambia aims for a favorable environment for agricultural producers with an objective of maximizing poverty reduction. The vision is a market led commercialized, efficient competitive, dynamic ANR in the context of sustainable development.

Tariffs

The tariff data are available for limited number of years for Gambian agricultural products. The import tariffs that are implemented by The Gambia for their top five import products from their top OIC exporters are high for oils, fats, waxes; miscellaneous products and coffee, tea, cocoa, spices. The tariffs have been at high levels for the last three years. Gambia has relatively low tariff rates for cereals and dairy, with probable reason that the products are key for nutrition, particularly rice being a major staple product of The Gambia. Exports are no exception with regards to high tariff rates. The Gambia faces high tariff rates for their top five export products for their top five agricultural OIC-country importers (Table 4.32 and Table 4.33).

Tables 4.34 and 4.35 summarize the role of NTMs in The Gambia's agricultural trade. In the former table, NTM types and product shares and counts affected from NTMs are shown. Food products is the main product category that is being affected from the existence of NTMs, where more than half of food imports are subject to NTMs. Half of the products in the animal category and vegetable category are impacted by NTMs.

Table 4. 32 Tariffs Set by Gambia for Top 5 Import Products from the OIC Exporters, %

	05: Vegetables, fruit	41-42-43: Oils, fats, waxes	07: Coffee, tea, cocoa, spices	08: Feeding stuff for animals	11-12: Beverages, tobacco
2014	15.7	20.0	4.3	5.5	20.0
2015	16.7	20.0	5.4	5.0	19.8
2016	16.2	20.0	5.3	7.0	19.9

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Table 4. 33 Tariffs Set by OIC Countries for Gambia's Top 5 Export Products, %

	03: Fish	02: Dairy	05: Vegetables, fruit	08: Feeding stuff for animals	06: Sugars
2016	9.0	5.1	14.6	1.5	3.0

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Table 4. 34 NTM Types and NTM Affected Products, Gambia

Sector	NTM Type	Share %	Count
Animal	1 type	8.8	20
Animal	2 types	23.7	54
Animal	3+ types	12.3	28
Animal	No NTMs	55.3	126
Vegetable	1 type	0.7	2
Vegetable	2 types	48.2	145
Vegetable	3+ types	1.0	3
Vegetable	No NTMs	50.2	151
Food Products	1 type	5.2	10
Food Products	2 types	40.4	78
Food Products	3+ types	16.6	32
Food Products	No NTMs	37.8	73
Hides and Skins	1 type	1.5	1
Hides and Skins	No NTMs	98.6	68
Wood	No NTMs	100.0	237

Source: WITS

Animal products, food products and vegetable products are mostly protected through NTMs where the most common forms of NTMs are SPS, technical barriers and trade related investment measures. For example, almost all of the import value of animals are protected with SPS and technical barriers while some animal product items are protected through trade related investment measures. Majority of food products and vegetable products are protected through SPS measures where a large fraction of vegetable products are protected with technical barriers to trade as well (Table 4.34).

The Gambia has preferential trade agreements with many non-OIC countries, such as US, European Union, Russia, Canada as well as other non-EU European countries under generalized system of preferences and with many countries in Asia under LDC-specific measures (WTO, PTA database). The regional trade agreement in force that The Gambia is part of is ECOWAS. An early announcement is made for The EU-West Africa Economic Partnership Agreement and yet to be signed. The Gambia has bilateral trade agreements with Ethiopia (signed in 2012) and Tunisia (signed in 2000). The only OIC countries that can export to The Gambia under preferential tariffs belong to the African group (Table 4.36).

Table 4. 35 NTM Coverage and Frequency Ratios in Agricultural Products, Gambia

Code	Sector	CR	FR	Count
A	**Animal**	99.7	90.6	87
B	**Animal**	99.7	85.4	82
I	**Animal**	1.9	29.2	28
P	**Animal**	40.1	70.8	34
A	**Vegetable**	83.1	81.3	148
B	**Vegetable**	83.1	81.9	149
I	**Vegetable**	0.0	1.7	3
P	**Vegetable**	0.4	1.9	1
A	**Food Products**	90.7	81.8	117
B	**Food Products**	25.8	74.8	107
E	**Food Products**	15.4	16.1	23
F	**Food Products**	15.4	16.1	23
I	**Food Products**	0.9	8.4	12
P	**Food Products**	2.2	9.6	5
B	**Hides and Skins**	0.1	3.2	1

Source: WITS
Note: A: Sanitary and phytosanitary measures, B: Technical barriers to trade, C: Pre-shipment inspection and other formalities, F: Charges, taxes and other para-tariff measures, G: Finance Measures, P: Export related measures

4.3.3. Stakeholder Perceptions in the Gambia

Ministry of Agriculture, Ministry of Trade, Industry, Regional Integration and Employment and Ministry of Fisheries, Water Resources and National Assembly Matters are the three major Government agencies directly responsible for the design and implementation of policies related to agriculture. During the visit to The Gambia, the research team conducted key informant interviews with high level officers from these three Ministries. Additionally, interviews were conducted with officers from the Gambia Chamber of Commerce and Industry (GCCI), Gambia Investment and Export Promotion Agency (GIEPA), The Gambia Agricultural Teachers Association and Turkish Cooperation and Coordination Agency (TIKA). In order to understand the viewpoints of the private sector, additional interviews were conducted with one exporter from the private sector and with the manager of the Gambia Horticultural Enterprises.

Agricultural Trade Policies

Agriculture is a major source of livelihood for The Gambia. Trade policies follow the overall goal of the Agricultural and Natural Policy (2017-2016) whose aim is to create a more favorable environment for producers through productivity increase. The ultimate goal is to achieve a market led commercialized, efficient, competitive, dynamic agricultural sector in the context of sustainable development. Among the proposed strategies, the policy paper emphasizes greater role of the private sector, reformed marketing strategies through accelerated agro-based industries. ANR Policy document is considered to be significant paper that helps to provide logical basis of planning. The document includes issues related to agricultural trade.

Liberalized trade policies through tariff reductions since 1980s has been a common practice in The Gambia for manufactured goods as well as agricultural products. The Gambia is a founding member of ECOWAS. Following ECOWAS, The Gambia started to apply common external tariffs such as 35% (particularly high for major products for food security), 20%, 10%, 5%, 0%. ECOWAS is working towards formation of a common market and the ultimate aim is customs union and a common monetary policy.

Import tariffs are the main source of protection of agricultural sector in The Gambia. Another important measure for protection is quotas for specific products, such as Irish potatoes imported from Europe. To protect the domestic production of major export products, such as groundnuts, the government applies import tariffs. For imported staple foods, such as rice (imported largely from Vietnam and Thailand, USA and Pakistan), there have been reductions in the tariff rates. The interviews revealed that the effect of reduction of tariffs on domestic prices of rice was not significant, causing the Government to lose a major revenue source, without achieving the objective of enabling the people to consume rice at a low cost. Besides rice, The Gambia basically imports practically everything, such as wheat, oil, vegetables. The respondents stated that The Gambia need to encourage rice tariffs in order to become self-sufficient and become a net exporter. Self-sufficiency is a main concern, particularly for staples. The Gambian Agriculture Transformation Program with the African Development Bank puts emphasis on the issue of food self-sufficiency. Export promotion schemes are required for major export crops, such as cashews, sesame and peanuts. The country has very little export products. Most export is done through re-exporting. For example, textile is imported from Vietnam, China and then The Gambia re-exports textiles to other African countries. Cashews are re-exported through exported cashews from neighboring countries.

Trade policy is a cross cutting topic across the Ministries in The Gambia. The coordination is achieved through a National Trade Policy Committee whose role is to advise the Prime Minister on Trade policy issues. Committee has members from the Ministry of Agriculture, the Ministry of Finance and Economic Affairs, Customs, Food Safety and Quality Authority as well as members from the NGOs.

Food security, supply chains, smallholder farmers

There are two major bottlenecks with respect to food security in The Gambia. The first is related to low productivity and / or lack of production of major staple foods. Rice, a major staple food, is being imported instead of developing opportunities for rice production Although the government initiated a tide irrigation policy for rice production, the irrigated farmland (for rice as well as other products) is not sufficient. In order to ensure availability and affordability of rice, import tariff rates were reduced. However, the stakeholder interviews revealed that the impact of tariff reduction was not reflected as low prices for the consumers. The second bottleneck with regards to food security is related to farmers' inability to have access to

productive inputs due to lack of credit facilities. Additionally, low bargaining power restricts the farmers to receive reasonable prices for the products to sustain their livelihoods. There are Government subsidies but not enough. Middlemen in the supply chain are the ones that determine the price that the farmers will receive.

Table 4. 36 OIC Member Countries that Export to Gambia under Preferential Tariffs

African Group	Arab Group	Asian Group
Benin	Comoros	Afghanistan
Burkina Faso	Djibouti	Albania
Chad	Egypt	Bangladesh
Cote d'Ivoire	Jordan	Indonesia*
Guinea	Mauritania	Iran
Guinea-Bissau	Morocco	Kyrgyzstan
Mali	Palestine	Malaysia*
Mozambique	Somalia	Pakistan*
Niger	Sudan	Tajikistan
Nigeria	Tunisia	Uzbekistan
Senegal*	Yemen	
Sierra Leone		
Togo		
Uganda		

Source: WTO RTA Database
Note: Countries marked with an asterisk are among the top 5 OIC countries from which Gambia's top import products are imported. Countries written in boldface letters have a free trade agreement in force with Gambia.

Fisheries has a high potential to create employment and improved nutrition. Fish has great investment opportunities. There are many foreign companies (Turkish, Spanish, Chinese and South Korean) with a focus on fish industry. There is a support from FAO for capacity development as well as government subsidies for fish production. The main problem with regards to fishing industry is lack of infrastructure. For instance, fish caught in the Gambian waters are transferred to Senegal and landed in Senegal for storage and transportation. Lack of infrastructure limits these activities to be performed in The Gambia thus limiting the opportunities of export marketing of fish in Gambia.

In order improve supply chains, there are various initiatives. One of them is The Gambia - Commercial Agriculture and Value Chain Management project that is initiated with support from the World Bank in 2017. The aim is to improve productivity and access to market of targeted agricultural commodities for smallholders in the project area. Under the Enhanced Integrated Framework (EIF) Programme, The Sector Competitiveness and Export Diversification Project (SCEDP) aims responding to the trade related programs. The project provides specific support for cashew nuts, groundnuts and sesame through finding new export opportunities and product diversification.

A problem, that is common for most least developed countries, is related to lack of opportunities for creating value added products. The stakeholders state that the country produces raw products and exports raw products. The value chain is weak and there is a need to improve on creating strong value chains. Ministry of Trade and to some extent Ministry of Agriculture are working on developing value chains.

OIC-Gambia agricultural trade relations and intra-OIC agricultural trade

The Gambia produces very few exportable agricultural products. The export products that are produced in the country are, peanuts, cashews, sesame, horticultural products (2 large farms

exporting to the European Union and Great Britain). The European Union was the leading export destination of ground nuts, an important export product of The Gambia. However, during the recent years, the EU increased its standards for acceptable limits of aflatoxin and now it is not possible to reach out to the EU markets. The groundnut exports are diverted to China to be used as animal feed. For many other products, EU is a leading export partner. For example, a key Gambian producer and exporter of out-of-season tropical fruits and crop vegetables which includes mangos, French beans, hot chilies, Pawpaw, lemons, eggplants, watermelons and squashes and freshly cut flowers is Gambian Horticultural Enterprise. Its markets are primarily to European countries such as the UK, Netherlands, France and the rest of the EU. Similarly, Radville farms produce mangoes for the Great Britain market. Many agricultural exports are re-exports with little added value. For example, the country exports raw cashews to India and imports them back in labeled and packaged form. The Gambia imports many of its staple food items. For example, rice is imported from Vietnam, USA, Pakistan; vegetable oil is imported from Thailand and Turkey; sugar is imported from Turkey; flour is imported from France and Turkey.

For the next five years, it is possible that Great Britain would continue to be a close partner for Gambia in addition to Turkey as well as other African OIC countries. For example, Senegal is already a border trade country and the trade between Gambia and Senegal can be increased. The country also has close trade ties with Morocco, Egypt, Dubai, India and China. The stakeholders point out that there is a need to create new and premium markets to for The Gambia's agricultural exports, since the EU market is lost due to food safety standards.

The stakeholders express that the goodwill of the current Government is an opportunity for enhanced trade ties between The Gambia and many other OIC countries. Also, inauguration of Turkish Airlines direct flights into Banjul is considered to be a great opportunity for enhanced trade ties with the OIC countries, Istanbul as a hub. The Turkish Airlines services will help open up the market for Gambia to the Middle East, Turkey and Europe. The availability of regular direct flights to Istanbul will also solve many problems related to logistics, shortening the time of shipment. The stakeholders expressed opinions that enhanced OIC trade is a win-win opportunity particularly for The Gambia. The future partners that are expressed by the stakeholders are, Turkey, Cote d'Ivoire, Guinea Bissau, Dubai, UAE.

The stakeholders expressed opinions that commercialization and value chain development is a major issue. There is a need to develop facilities for food processing. Trade should be diverted from Asia to premium markets such as the EU, where cashew, peanuts, and sesame are priority export products whose value chains need to be improved. In order to improve value chains and commercialize agricultural production, The Gambia Export and Investment Promotion Agency (GIEPA) is established by the Parliament in 2010. GIEPA works for investment promotion, business and export development, enterprise support and advocacy as a link between private sector and the Government. Trying to find export markets for private entrepreneurs, GIEPA complements the Ministry of Trade. The GIEPA personnel expressed concerns in relation to access to finance for export marketing. Also, due to labeling, packaging and health standards, producers are unable to prepare their products for exports. GIEPA also try to promote packaging investments. Moreover, The Gambia does not have accredited laboratories and therefore entire testing and packaging are all done in Senegal. Moreover, many of The Gambian plants (such as Maringa, baobab, hibiscus) have potential for use in pharmaceutical industry. The opportunities for diversification of export products as well as export markets are limited mainly due to lack of finance, poor infrastructure and small farmers with little opportunities for access to export markets.

4.4. Chad

Chad is a low-income country with a GDP of 10 billion USD and 670 USD GDP per capita in 2017. Chad ranks 134th in GDP (PPP) and 211th among a total of 230 countries. The average rate of GDP growth in Chad between 2010 and 2016 has been 4.5%. In 2016, Chad's GDP growth rate has been -6.3%, inflation rate has been -1.1%, and unemployment rate has been 5.8%.

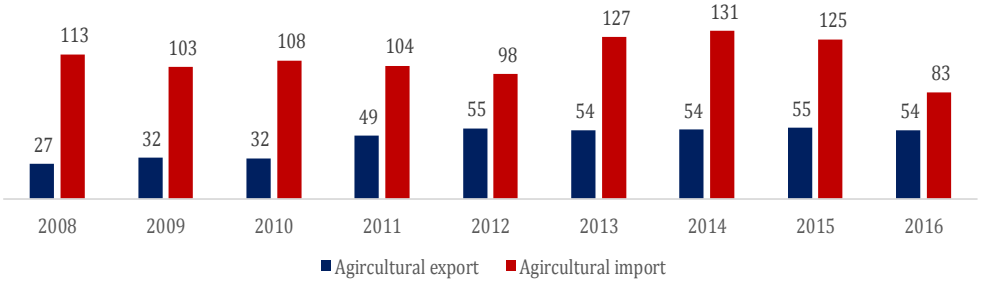
Being a landlocked country, Chad is one of Africa's largest countries with diverse weather patterns. Agriculture has a vital role for Chad's economy and is the primary source of maintaining people's livelihood in the region. Despite its slight decline since 2008, agriculture is still the largest sector in Chad economy with a share of 49.5% in GDP and a share of 87.2% in employment. Chad is among the largest oil producers in Africa, and the majority of Chad's export revenues come from oil products. Chad's leading agricultural export products are cotton, Arabic gum, and livestock. As of 2016, agricultural product exports are 3.5% of the countries' total exports.

Table 4. 37 Share of Agriculture in GDP, Employment and Trade, Chad

Year	% share in GDP	% share in employment	% share in exports	% share in imports
2008	54.6	87.2	0.8	20.9
2009	46.5	86.6	1.5	14.4
2010	51.9	86.8	1.1	11.6
2011	51.2	86.7	1.4	16.1
2012	54.9	86.6	2.0	15.4
2013	50.0	86.1	1.9	11.3
2014	50.6	85.5	2.1	10.4
2015	50.2	85.9	2.6	15.5
2016	49.5	87.2	3.5	15.4

Source: CEPII BACI, Eurostat RAMON, World Bank, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 37 Agricultural Exports and Imports, Million USD, Chad

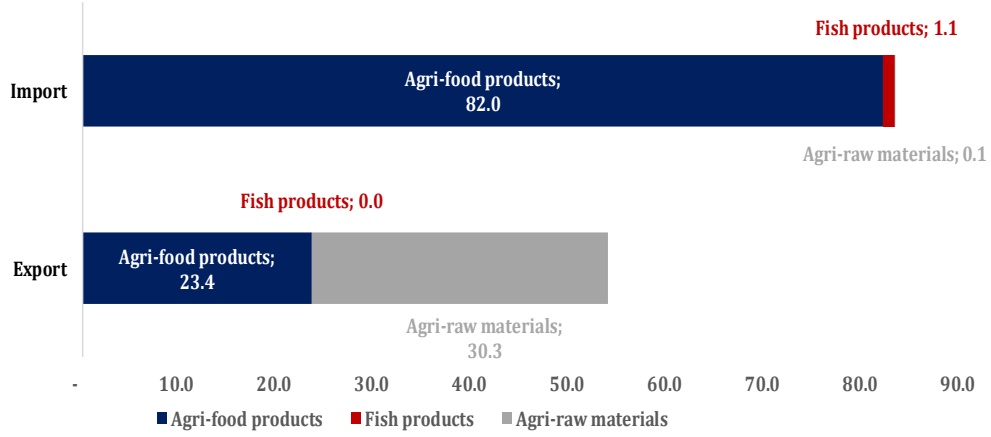


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Within subgroups of agricultural products,

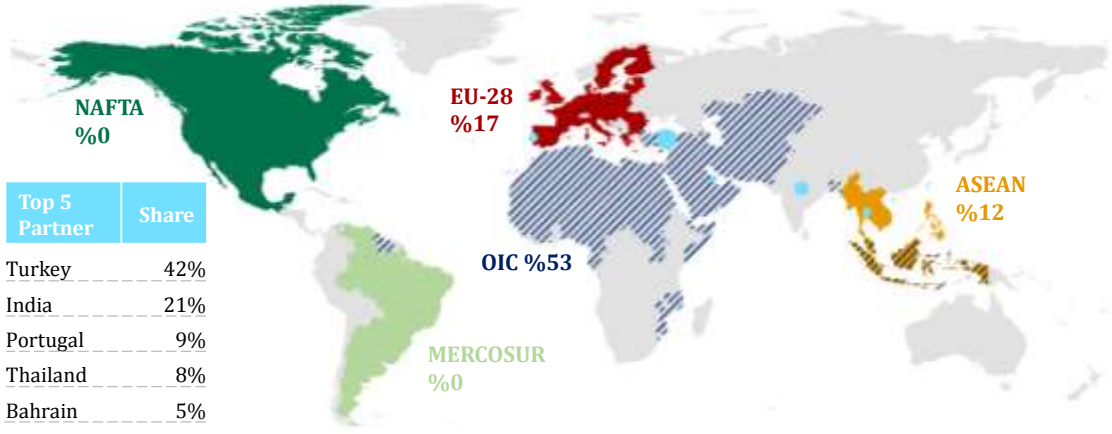
- Exports of agri-food products were 23 million USD and imports of 82 million USD in 2016, with a trade deficit of 59 million USD.
- Exports of agricultural raw materials were 30 million USD with no imports, meaning a trade surplus of 30 million USD in 2016.
- No fish products were exported versus 1 million USD worth of fish products imports, meaning the same amount of trade deficit in 2016 (see Figure 4.38).

Figure 4. 38 Agricultural Exports and Imports, Product Groups, Million USD, Chad, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

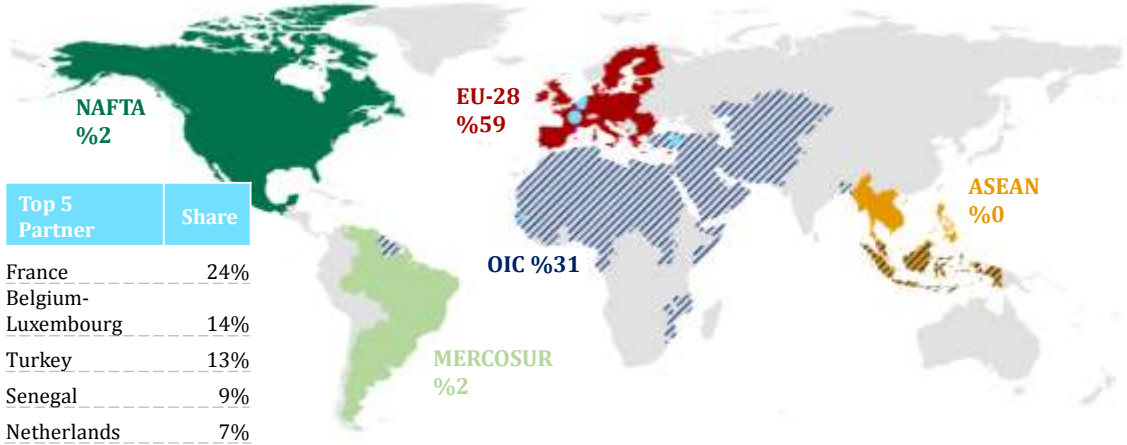
Figure 4. 39 Breakdown of Chad's Agricultural Export Destinations, 2016



Top 5 Partner	Share
Turkey	42%
India	21%
Portugal	9%
Thailand	8%
Bahrain	5%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 40 Breakdown of Chad's Agricultural Import Origins, 2016



Top 5 Partner	Share
France	24%
Belgium-Luxembourg	14%
Turkey	13%
Senegal	9%
Netherlands	7%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualization

Trade policies in Chad in terms of preferential trade agreements have been influenced by Economic and Monetary Community of Central Africa (CEMAC). Most of the free trade agreements are developed in parallel to this trade bloc. Currently, Chad is part of free trade agreements with 5 countries worldwide including 2 OIC member countries (Cameroon and Gabon) (WTO, RTA-IS).

4.4.1. Agricultural Trade with the OIC Countries

Table 4.38 shows that the OIC countries are the largest market for Chad exports as of 2016. Increasing from a share of 2% in total agricultural exports from 2008 to 53.1% in 2016, exports to the OIC members account for more than a half of Chad's agricultural exports. The corresponding increase in value is from 0.6 million USD to 28.6 million USD respectively from 2008 to 2016. The total value of Chad's agricultural imports to OIC countries are smaller than its exports, indicating a trade surplus. The value of Chad's agricultural imports from OIC countries has been within a range of 10.4 million USD to 20.9 million USD. Chad's agricultural imports from the OIC countries recorded its lowest value of the 2008-2016 period in 2012, which is possible due to the political instability in Chad's trade partners in Africa. The share of Chad's agricultural imports from the OIC countries increased from 38.3% in 2008 to 41.3% in 2015, but declined to 30.5% in 2016. The reason is the shrinking of the country's agricultural imports by around one third due to Chad's negative growth rate in 2016, which obviously affected the consumption patterns by reducing its imports while diverting it from OIC to non-OIC countries.

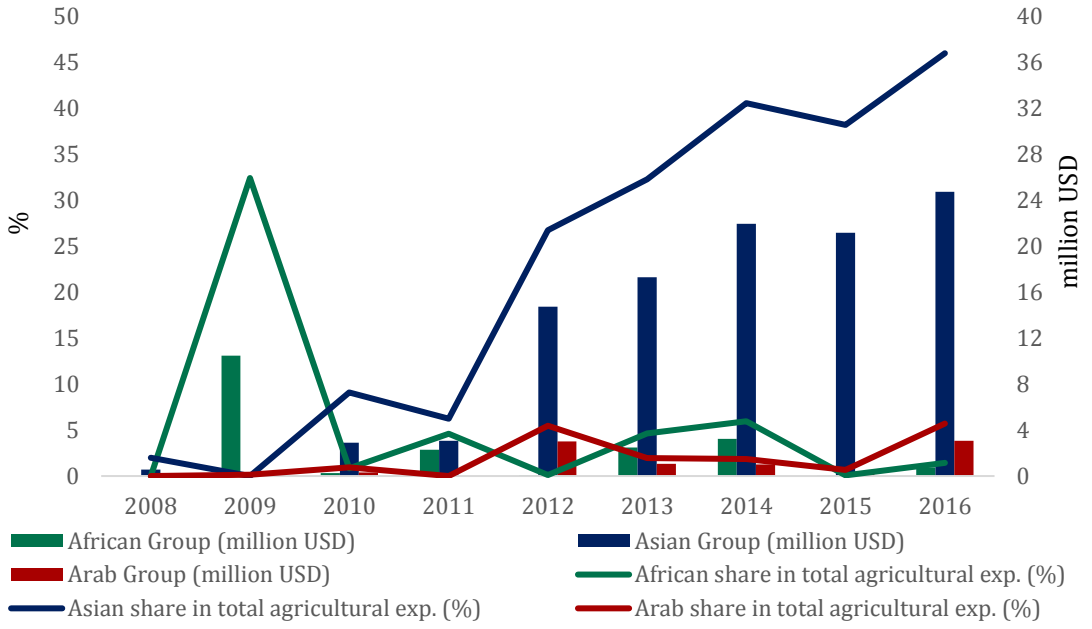
Table 4. 38 Value & Share of OIC in Chad's Agricultural Trade

Year	Value (exports) million USD	Share in Chad's total agricultural exports, %	Value (imports) million USD	Share in Chad's total agricultural imports, %
2008	0.6	2.0	43.3	38.3
2009	10.5	32.6	37.3	36.3
2010	3.5	10.9	29.5	27.3
2011	5.4	10.8	21.3	20.4
2012	17.8	32.3	11.3	11.5
2013	20.8	38.9	42.8	33.8
2014	26.2	48.4	45.2	34.5
2015	21.6	38.9	51.6	41.3
2016	28.6	53.1	25.4	30.5

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.41 presents the share of OIC groups in Chad's agricultural exports. The Asian group has become a significant market for Chad's agricultural exports, increasing from 2% in 2008 to 46% in 2016. As of 2016, the Asian group accounts for nearly half of Chad's agricultural exports with a value of 27.8 million USD. The shares of the African and Arab groups have remained below 6% each during the observation period, except for the African group's share of 32.4% in 2009. The unusually high share is probably the outcome of the global crisis in 2009.

Figure 4. 41 Share of OIC Groups in Chad's Agricultural Exports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

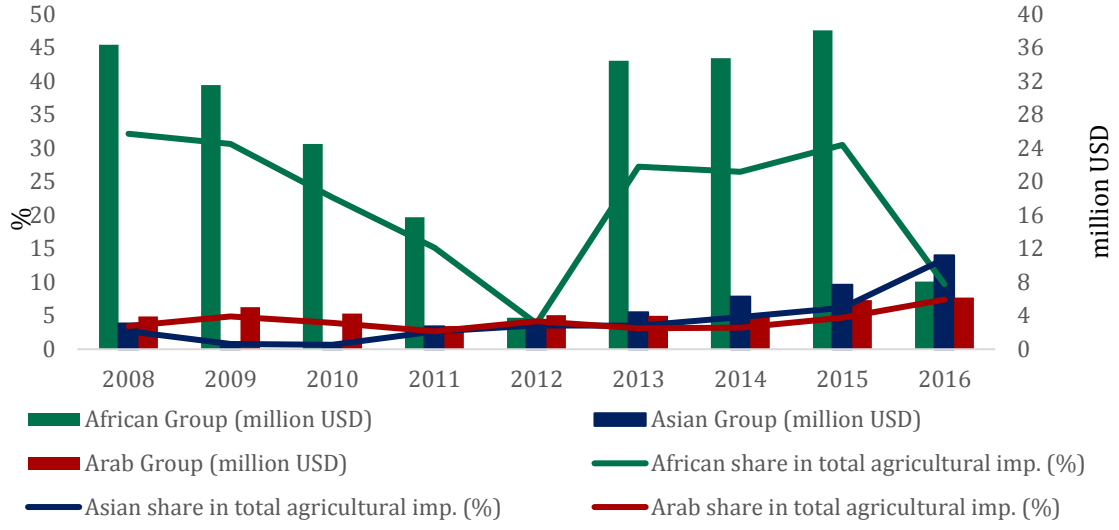
Figure 4.42 presents the share of OIC groups in Chad's agricultural imports. The share of the Asian group has increased from 3.1% to 11.2% during the 2008-2016 period, while the share of the Arab group has increased from 3.9% to 6.2%. The share of the African group has decreased from 32.1% in 2008 to 3.8% in 2012, which possibly stemmed from the political instability of Chad's trade partners in the region. Imports from Africa have recovered from the decrease in 2012 with an increase to 30.5% in 2015, but decreased to 9.7% afterwards, again reflecting Chad's poor economic performance in 2016.

General overview

The OIC countries account for nearly all of Chad's agri-food exports, and the Asian group has the largest share in total exports with 96.3%. As of 2016, the value of Chad's agricultural exports to the Asian group is 22.6 million USD. The value and shares of the African and Arab groups' agri-food exports are very small, despite the African group's relative importance for Chad's agri-food exports before 2012 (See Figure 4.43).

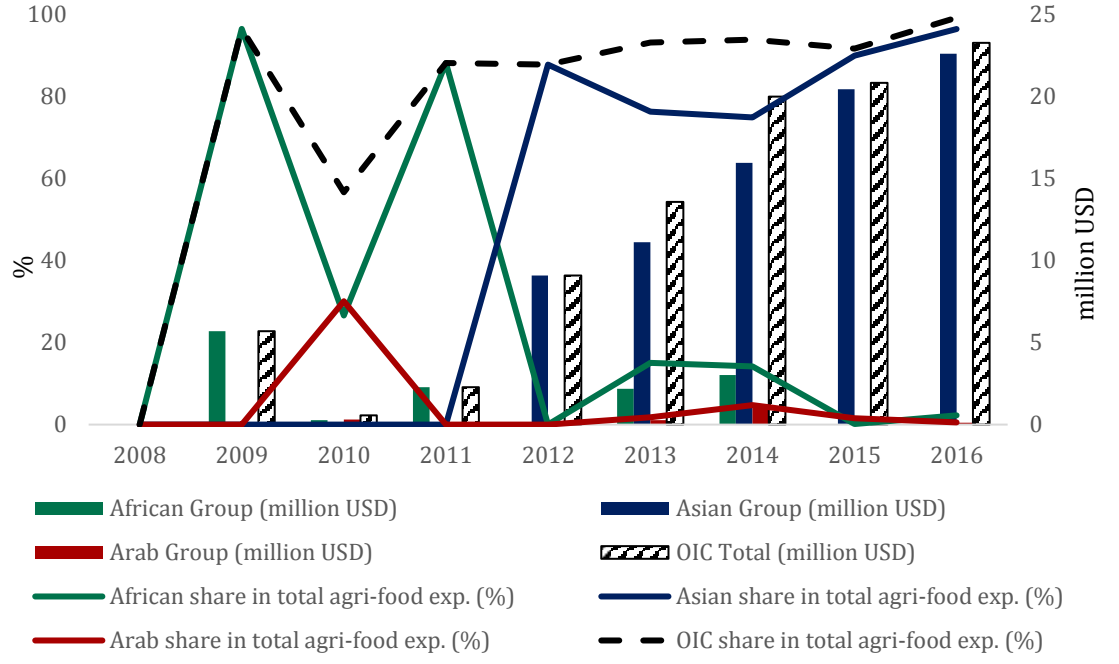
Agri-food imports are the primary source of Chad's agricultural imports, and the OIC countries are a significant provider of agri-food products to Chad with a share of 30.1%. Figure 4.44 shows that the share of the OIC countries increased from 38.2% in 2008 to 40.3% in 2015, but declined because of the sharp decrease in imports from the African group in 2016. The Asian group is becoming a significant agri-food import source for Chad, with its share increasing from 2.7% in 2008 to 13.6% in 2016. The corresponding increase in volume is from 3.4 million USD to 11.2 million USD (229% increase). The Arab group's share increased from 3% in 2008 to 6.6% in 2016.

Figure 4. 42 Share of OIC Groups in Chad's Agricultural Imports



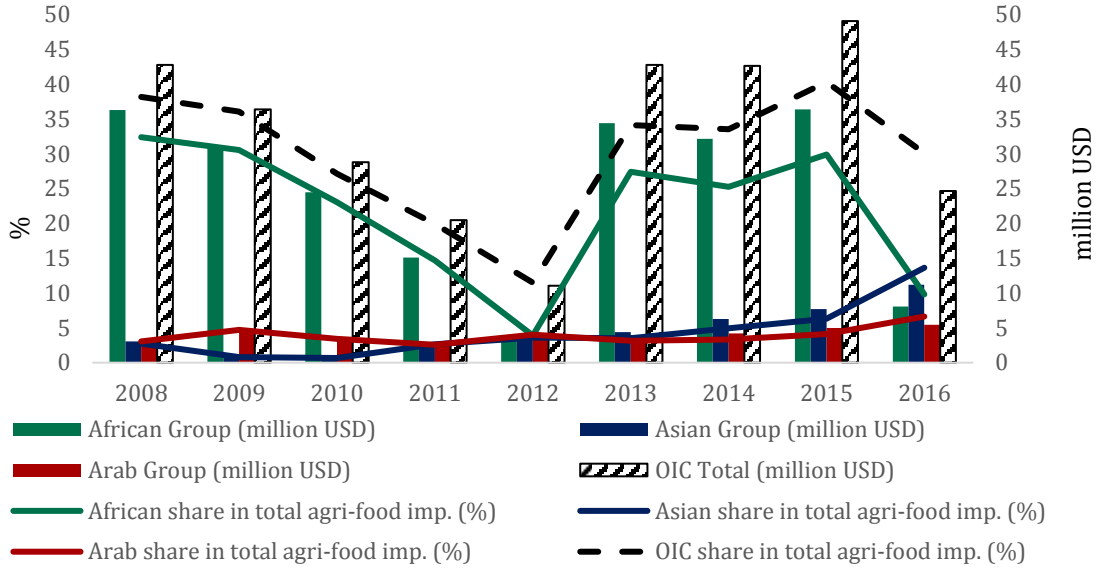
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 43 Exports of Chad's Agri-Food Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

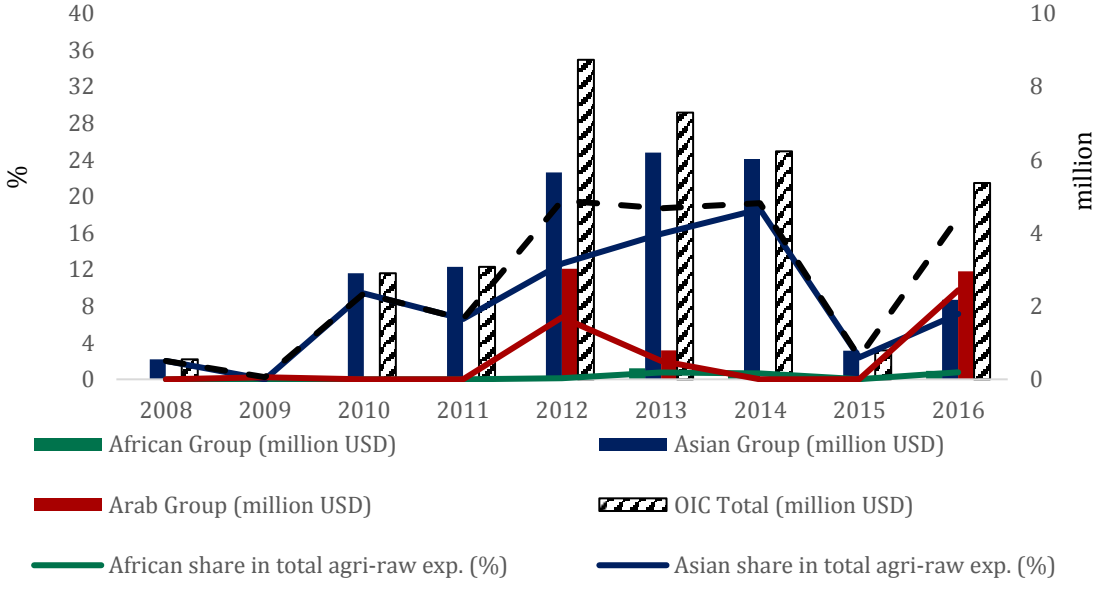
Figure 4. 44 Imports of Chad's Agri-Food Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

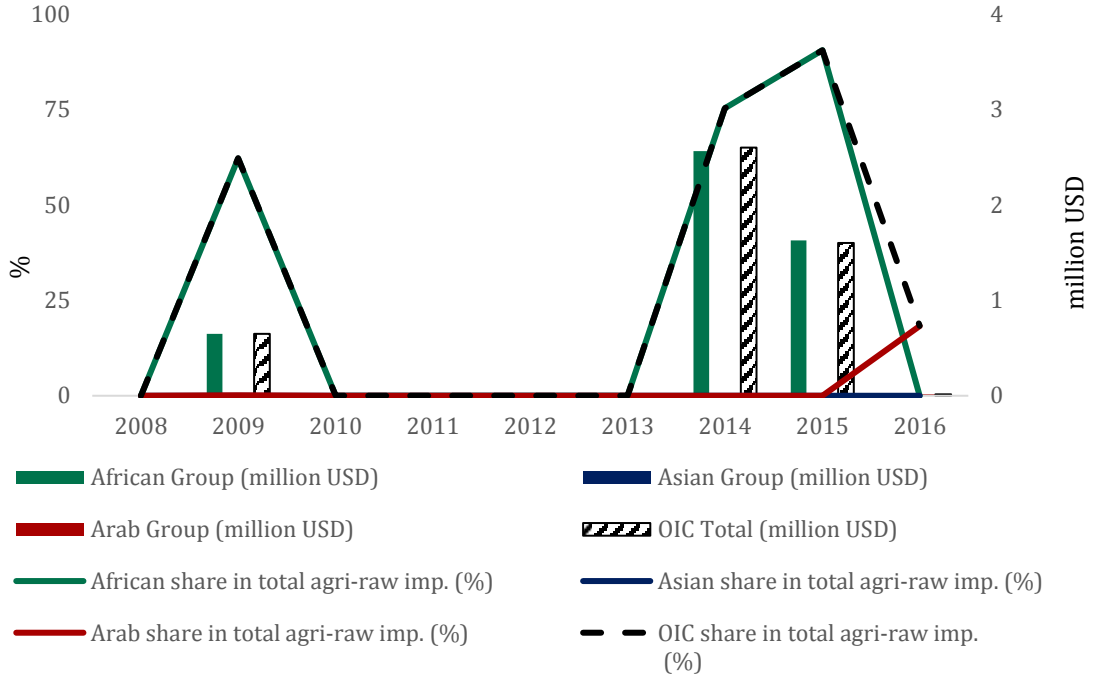
Figure 4.45 shows Chad's agricultural raw material exports to the OIC countries. The OIC countries' total share in Chad's agricultural raw materials export is 17.7% with a value of 5.4 million USD. The share of the African group is very small. The Arab group has a share of 9.7% in total agricultural raw material exports, while the Asian group has a share of 7.2%.

Figure 4. 45 Exports of Chad's Agricultural Raw Materials to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 46 Imports of Chad's Agricultural Raw Materials from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.46 shows Chad's agricultural raw material imports from the OIC countries. As of 2015, imports the OIC countries constitute the majority of Chad's agricultural raw material imports with a share of 90.5%. The African group is a significant provider of agricultural raw materials to Chad. The value of Chad's agricultural raw material imports from the Arab group is very small.

Figure 4.47 presents Chad's fish product exports to the OIC countries. The fact that Chad is a landlocked country explains the low values in fish export. With the data unavailable for most of the observation period, Chad's total fish product import of 4.8 million USD to the African group in 2009 is probably a result of the decline in world trade due to the global crisis.

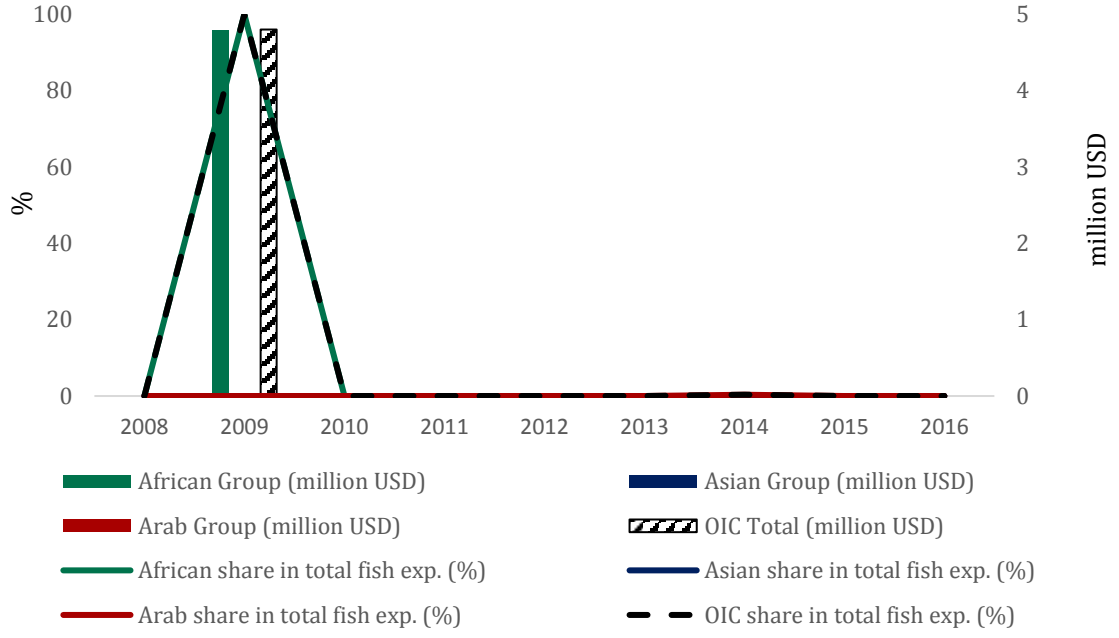
In summary;

- Agri-food trade constitutes the majority of Chad's agricultural imports and exports to OIC countries.
- The political instability in Chad's neighboring African group countries in 2012 and Chad's poor economic performance in 2016 negatively affected Chad's import from the OIC group countries.
- The Asian group has the highest share in Chad's agri-food exports with a share of 96.3% in 2016, followed by the African group and the Arab group with respective shares of 2.3% and 0.5%.
- The African group had the highest share in Chad's agri-food imports with a share of 29.9% in 2015, followed by the Asian group and the Arab group with respective shares of 6.3% and 4.1%. However, the African group's share fell behind that of the Asian group with a sharp decline in 2016.
- The Arab group has the highest share in Chad's agricultural raw material exports with a share of 9.7% in 2016, followed by the Asian group and the African group with respective shares of 7.2% and 0.8%.

- The available data on Chad's agricultural raw material imports is limited. However, the African group had the highest share in Chad's agricultural raw material imports in 2015 with a share of 90.5%.

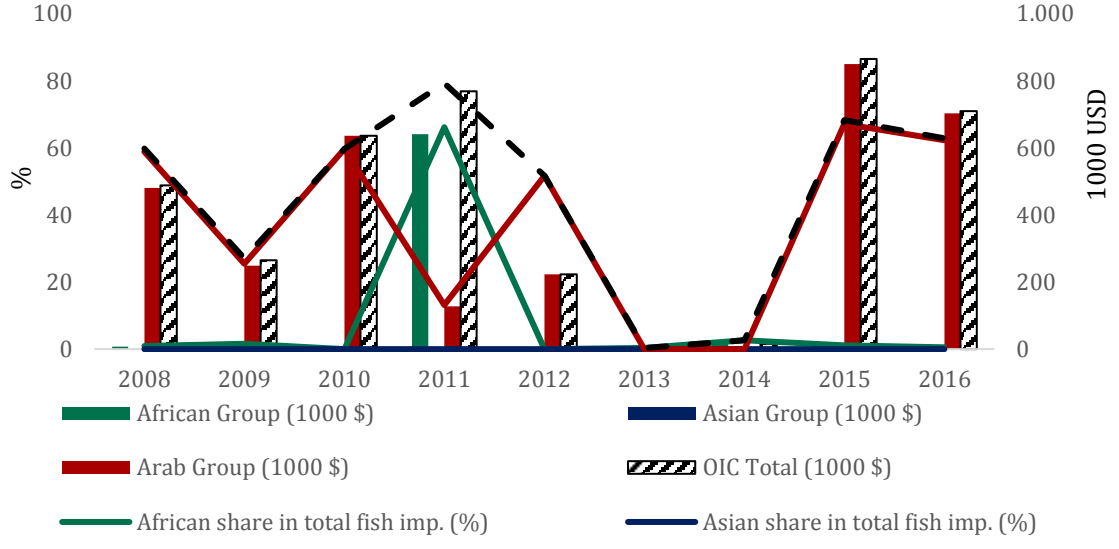
The Arab group has the highest share in Chad's fish product imports with a share of 62.2 in 2016, followed by the African group with a share of 0.6%.

Figure 4. 47 Exports of Chad's Fish Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 48 Imports of Chad's Fish Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Top 5 Agricultural export and import products of Chad in the OIC Markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Chad's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

22: Oil-seeds
263: Cotton
08: Feeding stuff for animals
21: Hides, skins
00: Live animals

with percentage shares of 83.4%, 14.9%, 1.0%, 0.5%, and 0.1%, respectively.

With regards to Chad's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Chad's total agricultural imports from the OIC countries are (top 5 agricultural import products to the OIC):

11-12: Beverages, tobacco
04: Cereals
09: Miscellaneous p.
05: Vegetables, fruit
06: Sugars

with percentage shares of 29.6%, 25.0%, 21.3%, 10.1%, and 5.6%, respectively.

The products in the two lists are mutually exclusive. Chad does not commonly import the commonly exported products from OIC countries.

Table 4. 39 Distribution of Chad's Top 5 Export Products, by Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008		2.0		98.0	100
2009			0.2	99.8	100
2010	0.7	9.2	1.0	89.1	100
2011	2.5	6.4		91.1	100
2012	0.1	27.1	5.6	67.2	100
2013	4.6	32.4	2.0	61.0	100
2014	6.0	40.9	1.9	51.2	100
2015		2.0		98.0	100
2016			0.2	99.8	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.39 shows the distribution of the total export value of the top five export products of Chad to the OIC countries according to destinations. With some data missing, non-OIC countries constitute the most of Chad's top five agricultural product exports. The Asian group's share has increased from 9.2 to 40.9 in the expense of non-OIC countries between 2010 and 2014, but declined to 2% in 2015. The available data shows that the shares of the African and the Arab groups have been small during the observation period, not exceeding 6%.

Table 4.40 shows the distribution of the top five agricultural products from the OIC countries according to the region of origin. Non-OIC countries provide the majority of Chad's import of the top five agricultural products. The data shows that Chad's imports have not been from a stable source with country shares radically changing within the observation period. As of 2016, the

share of non-OIC countries' share is 67.3%, the share of the Arab group is 23.1%, and the share of the Asian group is 9.6%. The 2016 data of the African group is not available.

Table 4. 40 Distribution of Chad's Top 5 Import Products, by Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008				100.0	100
2009	10.0		1.9	88.1	100
2010	71.6			28.4	100
2011	25.0			75.0	100
2012	93.6			6.4	100
2013	41.6			58.4	100
2014	23.9			76.1	100
2015	5.2	5.5		89.3	100
2016		9.6	23.1	67.3	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.41 shows that Turkey is the largest importer of Chad's top five agricultural products in the OIC market. The share of Turkey in the last available three-year average is 77.6%. Indonesia is the second largest market for the top five agricultural products of Chad with a share of 10.4%. The third largest market is Nigeria, followed by Bahrain and Egypt.

Table 4. 41 Top 5 OIC Destination Countries for Chad's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, million USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Turkey	19.7	77.6
Indonesia	2.6	10.4
Nigeria	1.3	5.2
Bahrain	0.9	3.6
Egypt	0.3	1.2

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4. 42 Top 5 OIC Origin Countries of Chad's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, million USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Cameroon	14.6	39.4
Senegal	9.9	26.7
Turkey	7.9	21.3
Egypt	3.0	8.2
UAE	0.5	1.4

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.42 shows the first five markets that Chad purchases the top five import products. Cameroon is the largest market for Chad's top five agricultural product imports from the OIC countries with a share of 39.4%, followed by Senegal with a share of 26.7%. Turkey is the third largest market with a share of 21.3%, followed by Egypt and the United Arab Emirates.

4.4.2. Agricultural Trade Policies in Chad

Background

The agricultural sector in Chad has the primary aim of guarantee economic development and food security, thus the country's agricultural policy is to increase the production together with its productivity, to provide a higher standard of living of its population.

The heavy taxation of imports and exports of agricultural goods has impeded the functioning of food markets in Chad. However, cross-border trade and local cereal markets play a crucial role in supplying areas in short supply and in reducing food insecurity.

Transport infrastructure is inadequate with many agricultural settlements being isolated. Those two factors result in high cost of transporting food products. Trade is also hampered by regulatory constraints, limiting the ability of producers to export their agricultural produce and increase their earnings (WTO, 2007).

Table 4. 43 Tariffs Set by Chad for Top 5 Import Products from the OIC Exporters, %

	11-12: Beverages, tobacco	04: Cereals	09: Miscellaneous p.	05: Vegetables, fruit	06: Sugars
2011	16.5	21.1	14.9	30.0	23.7
2015	10.5	7.6	2.9	14.7	3.7
2016	11.9	18.7	12.3	30.0	30.0

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note. Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Actually the tariffs applied to Chad's top five imported products from the OIC countries vary between 11.9 percent (beverages and tobacco) and 30 percent (vegetables, fruit and sugar) (Table 4.43). The only export good to OIC countries for which there is available data is oil-seeds and is subject to 12.3 percent of import duty (Table 4.44). Table 4.45 gives the list of OIC countries exporting to Chad under preferential tariffs but no detail data could be found at product level.

Table 4. 44 Tariffs Set by OIC Countries for Chad's Top 5 Export Products, %

	22: Oil-seeds
2016	12.3

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4. 45 OIC Member Countries that Export to Chad under Preferential Tariffs

African Group	Arab Group	Asian Group
Benin	Comoros	Afghanistan
Burkina Faso	Djibouti	Albania
Cote d'Ivoire	Egypt*	Bangladesh
Gambia	Jordan	Indonesia
Guinea	Mauritania	Iran
Guinea-Bissau	Morocco	Kyrgyzstan
Mali	Palestine	Malaysia
Mozambique	Somalia	Pakistan
Niger	Sudan	Tajikistan
Nigeria	Tunisia	Uzbekistan
Senegal*	Yemen	
Sierra Leone		
Togo		
Uganda		

Source: WTO RTA Database
Note: Countries marked with an asterisk are among the top 5 OIC countries from which Chad's top import products are imported.

4.5. Thailand

Thailand has moved up from a low-income to an upper-middle income status in less than a generation, and has been an upper-middle income country since 2011, with a GDP of 455 billion USD and per capita income of USD 5,960 in 2017, Thailand ranks the 20th in GDP (PPP) among a total of 230 countries. Thailand's economy reached a growth rate of 3.9 percent in 2017, the highest since 2012, versus an estimated 3.0 percent of the global economy and 4.3 percent of emerging markets and developing economies. The high growth in 2017 was realized largely by a rapid export growth at the rate of 7.5 percent. Inflation in the country is low: At 0.7 percent in 2017, it remained even below the target range of 1-4 percent.

In 2017, agricultural sector in Thailand grew by 6.2 percent, fully recovering from the severe drought in 2015. This growth helped offset negative effects of the fall in agricultural prices amounting to 2.7 percent, driven by rubber and oil palm price decline. The production growth has been especially important in rice paddy (6.5 percent) and sugarcane (16 percent), and agricultural farm income grew by 3.4 percent during 2017 (WP Thailand, 2018). The growth in agricultural sector is expected to continue in the future.

Table 4. 46 Share of Agriculture in GDP, Employment and Trade, Thailand

Year	% share in GDP	% share in employment	% share in exports	% share in imports
2008	10.1	42.5	17.1	6.1
2009	9.8	39.0	17.4	6.9
2010	10.5	38.2	17.2	6.4
2011	11.6	41.0	19.9	6.5
2012	11.5	42.1	17.9	6.8
2013	11.3	39.6	17.3	6.6
2014	10.1	33.4	16.9	7.2
2015	9.0	32.3	15.8	7.6
2016	8.5	33.3	15.5	8.3

Source: CEPII BACI, Eurostat RAMON, World Bank, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.46 presents the relative importance of agricultural sector in Thailand for the period of 2008-2016. The share of agriculture in GDP declined from 10.1 percent to 8.5 percent, as the share of agricultural sector in employment fell from 42.5 percent to 33.3 percent. The share of agricultural sector in exports reduced slightly from 17.1 percent to 15.5 percent, while the share of agricultural imports increased from 6.1 percent to 8.3 percent in the same period. Despite falling shares of agriculture, it remained a major source of income for Thai households.

Thailand introduced a 20-Year National Strategy aiming to become a high income country by the year 2038. Although the strategy entered into force in October 2018, its goals had been taking shape in the preceding years, as revealed by the increasing shares of manufacturing and service sectors. Likewise, the fall in the share of agriculture can be viewed as one of the early results of the envisioned transformation of the Thai economy.

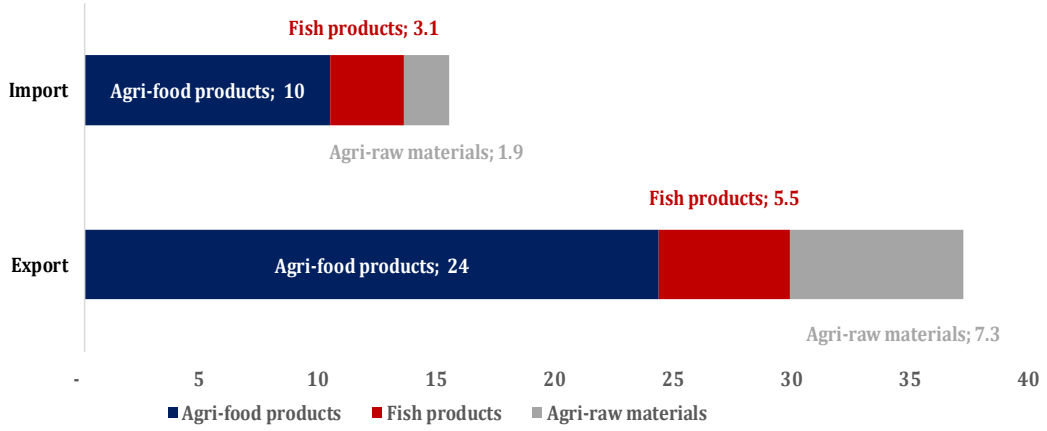
Concerning international trade links, Thailand is a founding member of ASEAN and has strong trade relations with the member countries. In terms of trade balance, Thailand has a surplus both in its overall trade and in agriculture. As of 2016, agricultural exports worth 37 billion USD led to the considerable agricultural trade surplus of 22 billion USD (see Figure 4.49).

A look at the decomposition of agricultural exports by subgroups indicates the following:

- Exports of agri-food products were 24.2 billion USD and imports 10.4 billion USD with a trade surplus of 13.9 million USD in 2016.
- Exports of agricultural raw materials were 7.3 billion USD and imports 1.9 billion USD with a trade surplus of 5.4 billion USD in 2016.
- Exports of fish products were 5.5 billion USD and imports 3.1 billion USD with a trade surplus of 2.4 million USD in 2016 (see Figure 4.49).

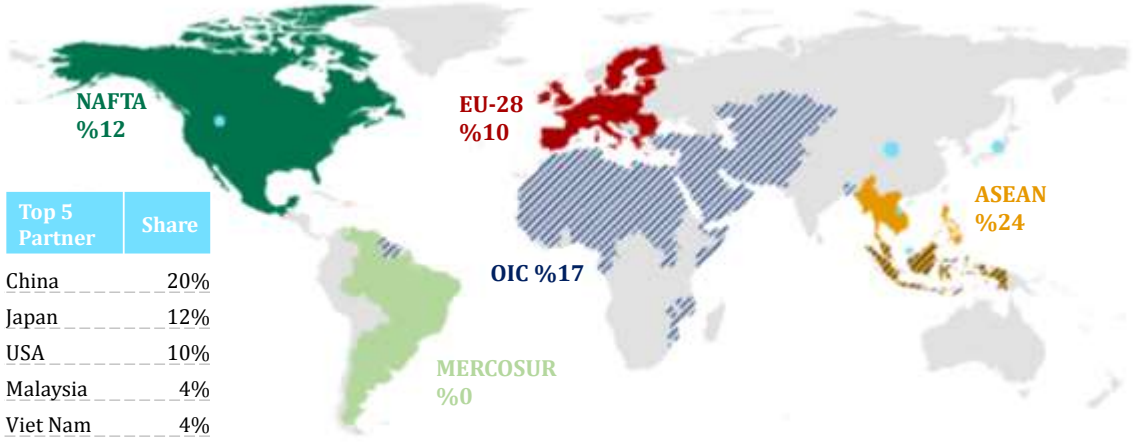
Thailand clearly has comparative advantage in all three product groups and manages to sustain a sizable trade surplus.

Figure 4. 49 Agricultural Exports and Imports, Product Groups, Billion USD, Thailand, 2016



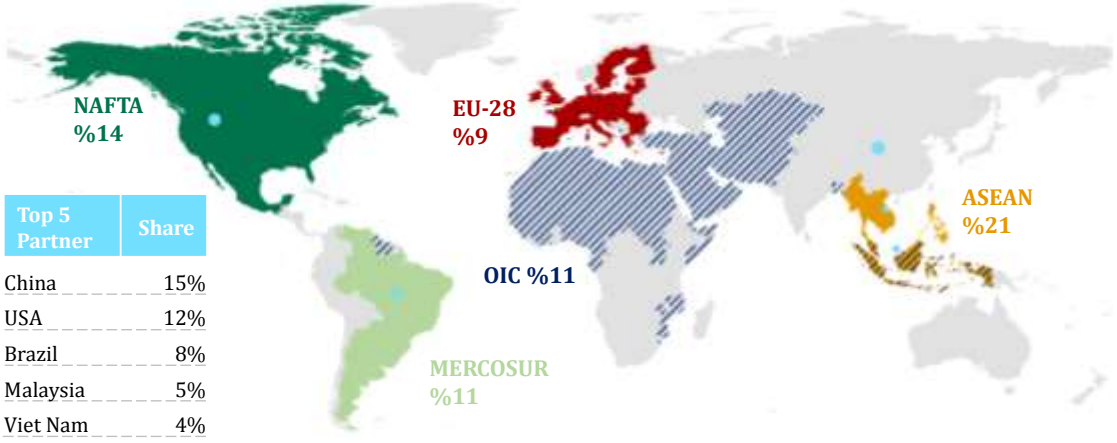
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 50 Breakdown of Thailand's Agricultural Export Destinations, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 51 Breakdown of Thailand's Agricultural Import Origins, 2016



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

4.5.1. Agricultural Trade with the OIC Countries

General overview

In spite of its status as a founding member of the ASEAN, the bloc's share in Thailand's exports and imports have been relatively low (23 percent and 21 percent respectively, in 2016). Thai imports made up 16 percent of the ASEAN agricultural exports, and Thai exports amounted to 8 percent of total agricultural imports of ASEAN.

By contrast, the OIC member countries' share in the external trade of Thailand decreased during 2008-2016. Thailand recorded an agricultural trade surplus of 4.5 billion USD with the OIC partners in 2016, down from 5.7 billion USD in 2008.

Table 4. 47 Value & Share of OIC Countries in Thailand's Agricultural Trade

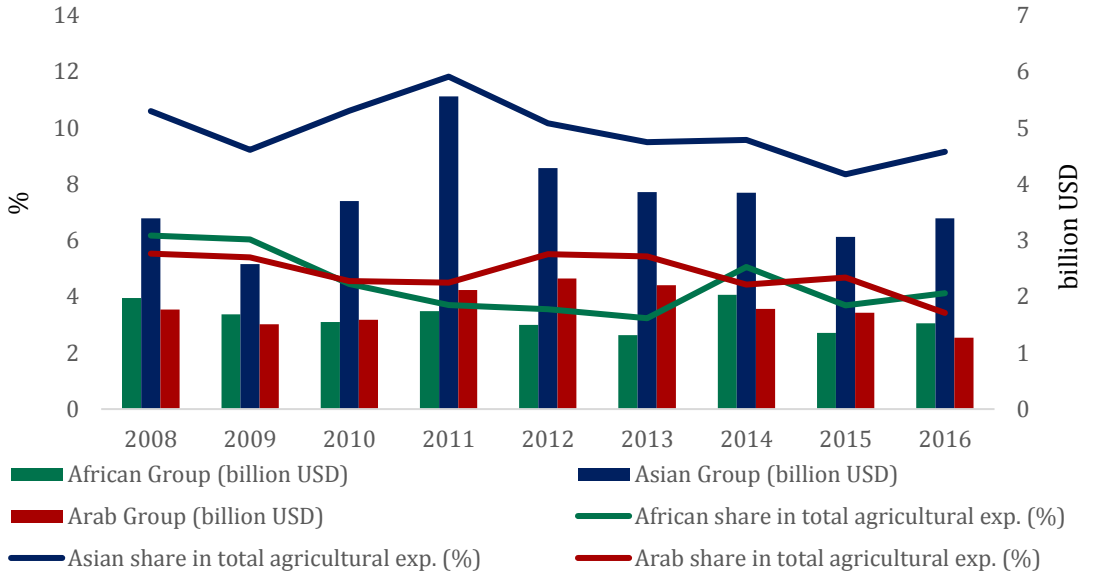
Year	Value (exports) billion USD	Share in Thailand's total agricultural exports, %	Value (imports) billion USD	Share in Thailand's total agricultural imports, %
2008	7.1	22.3	1.4	14.1
2009	5.8	20.7	1.1	12.9
2010	6.8	19.6	1.4	12.9
2011	9.4	20.0	1.8	13.2
2012	8.1	19.2	1.8	11.9
2013	7.4	18.2	1.7	11.7
2014	7.7	19.1	1.7	11.8
2015	6.1	16.7	1.7	11.9
2016	6.2	16.7	1.7	11.3

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.52 shows the distribution of Thailand's agricultural exports to the three OIC member country groups. The shares of all three groups' in total agricultural exports of Thailand fell from 2008 to 2016. The Asian group's share slightly declined from 10.6 to 9.2 percent, while the African group's share went down from 6.2 to 4.1 percent. Similarly, the share of the Arab group decreased from 5.5 percent and 3.4 percent in total agricultural exports. While the Arab group

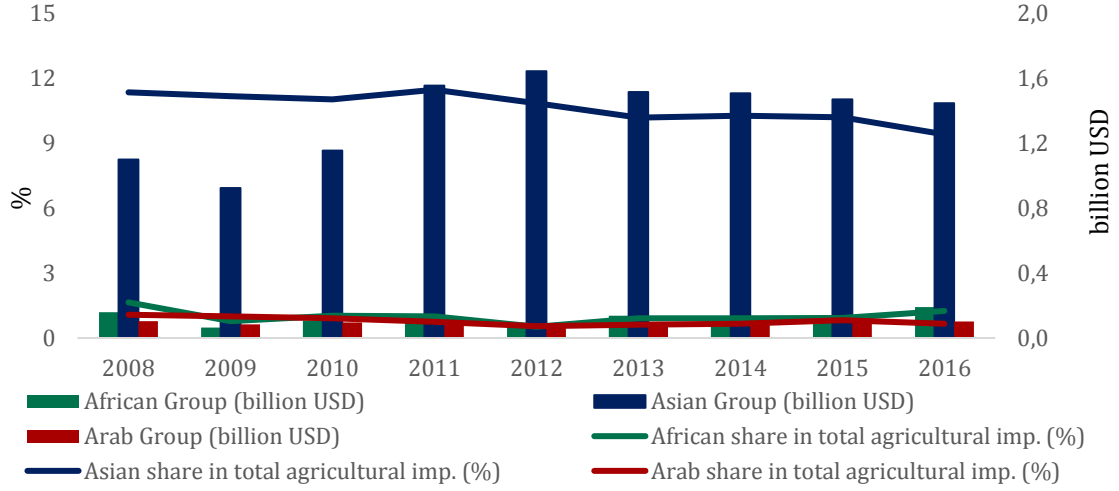
has the lowest share in Thailand's total agricultural exports, none of the three groups' share is higher than 10 percent.

Figure 4. 52 Share of OIC Groups in Thailand's Agricultural Exports



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 53 Share of OIC Groups in Thailand's Agricultural Imports

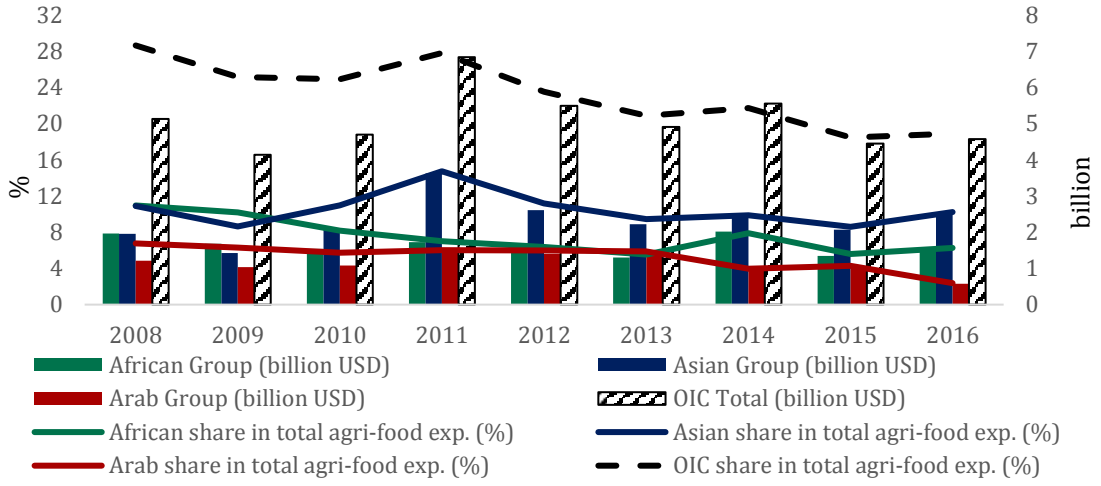


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.53 shows the distribution of Thailand's agricultural imports according to the three OIC member country groups. Here again the lowest share of imports among the three OIC groups is of the Arab group with less than 1 percent. The African group's share is slightly over 1%, with the Asian group around 9 percent. In addition, all three groups share in Thailand agricultural imports decreased from 2008 to 2016. However due to the increase in total exports of agricultural products, this does not mean a reduction in the volume, for the African and Asian Groups, while the Arab group maintained the very low level of agricultural exports to Thailand around 100 million USD annually.

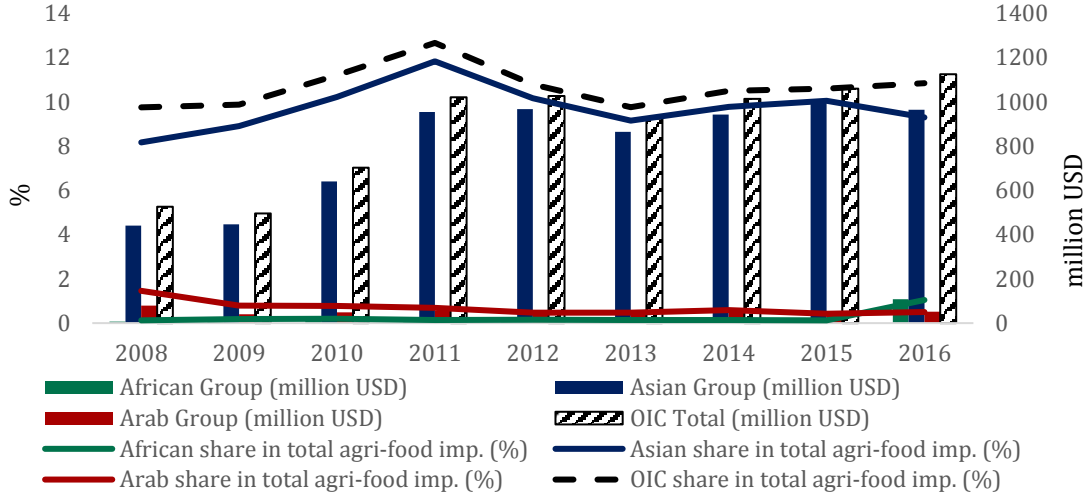
Figure 4.54 and 4.55 show respectively, Thailand's exports and imports of agri-food products from OIC countries. The total agri-food products exports show a clear decreasing trend while the only group maintaining a stable trend around 10% is the Asian group, the other two groups share being very low and decreasing. When it comes to the imports of agri-food products, the total exceeded only modestly 1 billion USD, before going down and stabilizing around 1 billion USD. Thailand imports of agri-food products from OIC countries comes largely from the Asian group. There is only a turn upwards in the imports from the African group in 2016, however it is difficult to say anything at this stage.

Figure 4. 54 Thailand's Agri-Food Products Exports to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

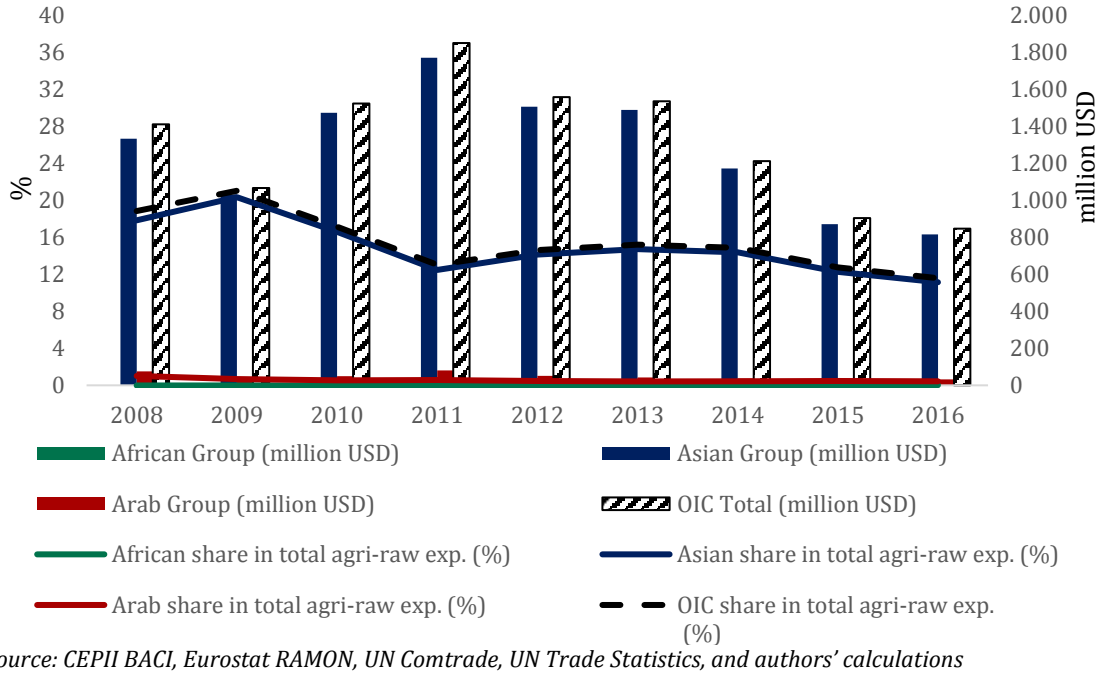
Figure 4. 55 Thailand's Agri-Food Products Imports from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

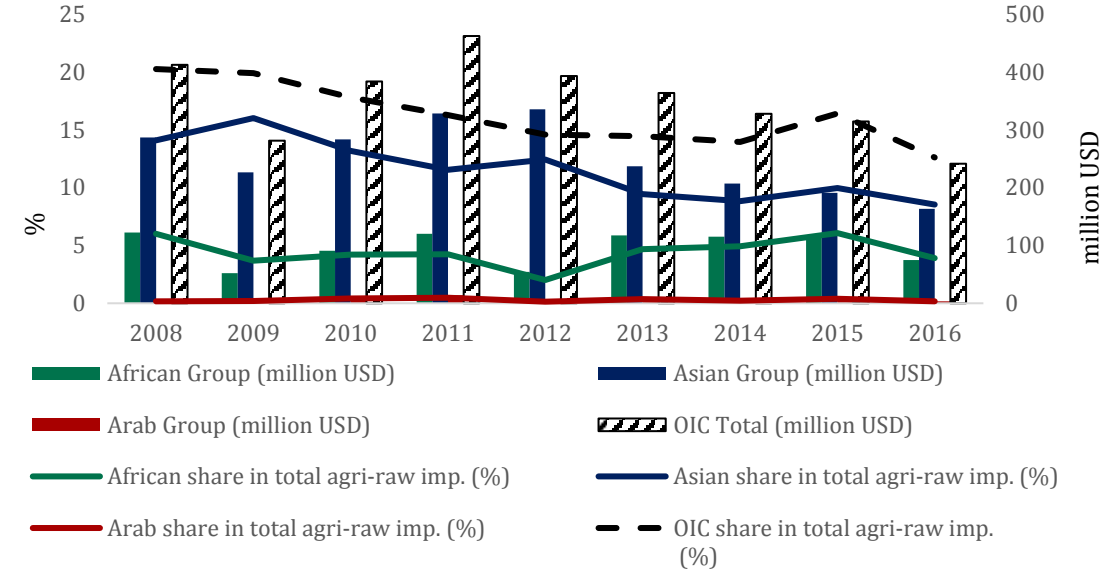
For agricultural raw materials exports of Thailand to the OIC countries, the Asian group dominates. However the volume is very low and diminishing, the same situation is observed in imports with the Asian group having the largest share with the African group having a higher share than in the exports, although a volume of imports in 2016, less than 100 million USD.

Figure 4. 56 Thailand's Agricultural Raw Materials Exports to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 57 Thailand's Agricultural Raw Materials Imports from the OIC Groups

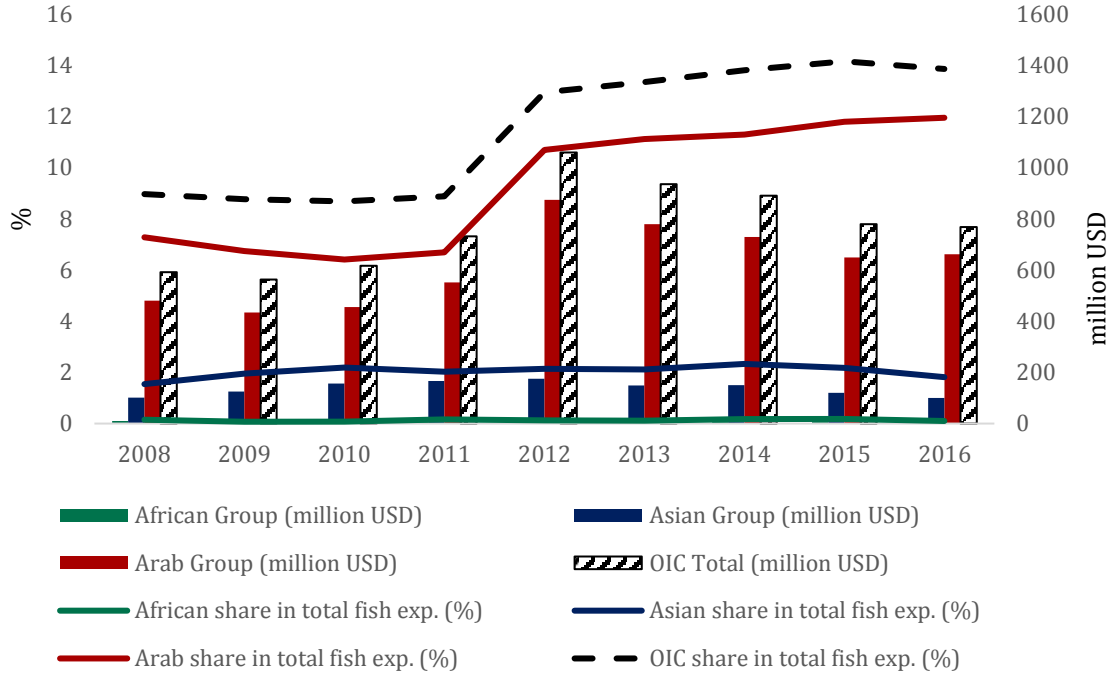


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The situation somehow differs when it comes to the exports of fish products to the OIC countries in Figure 4.58. Thailand has an increasing export trend in this category with the largest share exported to the Arab group, followed by Asian group with a stable trend. Obviously Thailand has a comparative advantage in Fish products and manages to diversify its export markets since

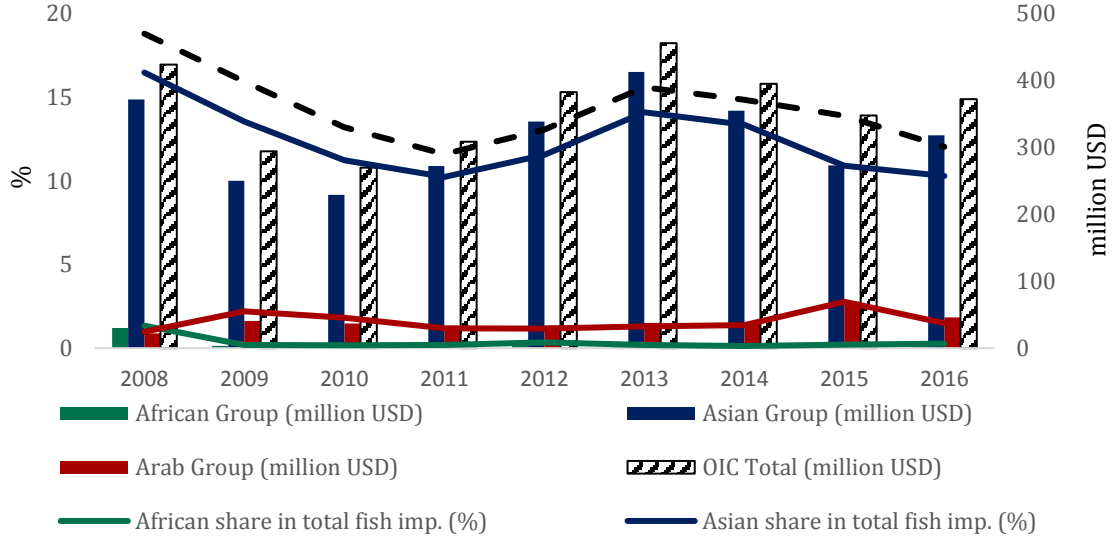
despite the increase of the share of OIC countries lately, it only represents 14 percent of its exports of Fish products.

Figure 4. 58 Thailand's Fish Products Exports to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 59 Thailand's Fish Products Imports from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Looking at the imports of fish products from OIC countries, a negative trend is clearly seen, again with the largest part imported from the Asian group also with a negative trend (Figure 4.59)

To complete the analysis, the external trade with the OIC countries will be examined at product level.

Top 5 Agricultural export and import products of Thailand in the OIC Markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Thailand's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

04: Cereals
06: Sugars
23: Crude rubber
03: Fish
05: Vegetables, fruit

with percentage shares of 34.4 percent, 16.3 percent, 14.4 percent, 12.2 percent, and 7.2 percent, respectively, representing in total 84.5 percent of total agricultural exports.

With regards to Thailand's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Thailand's total agricultural imports from the OIC countries are (top 5 agricultural import products to the OIC):

03: Fish
09: Miscellaneous p.
41-42-43: Oils, fats, waxe
07: Coffee, tea, cocoa, spices
04: Cereals

with percentage shares of 21.4 percent, 10.2 percent, 10.1 percent, 10.0 percent, and 8.9 percent, respectively, representing in total 60.6 percent of total agricultural imports.

Thailand's agricultural trade with OIC countries mainly consists of cereals, sugars, crude rubber, fish and vegetables, fruit in exports and of fish, miscellaneous, oils, fats, waxe, coffee, tea, cocoa, spices and cereals in imports. Cereals and fish there are both exported and imported.

However the greatest part of the exports in those 5 export products is to non-OIC countries, with an increasing trend since 2008 and having attained roughly 80 percent of the total agricultural exports, versus 75 percent at the beginning (Table 4.48).

Table 4. 48 Distribution of Thailand's Top 5 Export Products, by Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	7.7	11.1	6.5	74.8	100
2009	7.6	9.9	6.4	76.1	100
2010	5.6	11.4	5.3	77.7	100
2011	4.6	12.6	5.2	77.7	100
2012	4.6	11.1	6.7	77.7	100
2013	4.3	10.3	6.6	78.9	100
2014	7.0	10.7	5.4	77.0	100
2015	5.2	9.3	5.8	79.7	100
2016	5.9	10.2	4.2	79.6	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The share of non-OIC countries as the origin of the top five import products is even higher and with an increasing trend, since it was 90 percent in 2016 versus 87 percent in 2008 (Table 4.49).

Table 4. 49 Distribution of Thailand's Top 5 Import Products, by Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.7	11.8	0.6	87.0	100
2009	0.2	10.5	1.3	88.1	100
2010	0.2	9.0	0.9	89.9	100
2011	0.1	8.7	0.7	90.5	100
2012	0.3	8.5	0.5	90.7	100
2013	0.2	9.7	0.6	89.5	100
2014	0.2	9.8	0.6	89.4	100
2015	0.2	8.3	1.1	90.5	100
2016	1.4	8.3	0.7	89.6	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Among the top 5 destination countries for Thailand's top 5 agricultural export products, top two are both OIC and ASEAN members, namely Malaysia and Indonesia with a total share of 42.1 percent (Table 4.50). It is followed by Benin, Nigeria and Saudi Arabia, with shares below 10 percent, showing that apart the first two countries mentioned, the export markets of Thailand within the OIC are also diversified.

Table 4. 50 Top 5 OIC Destination Countries for Thailand's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, million USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Malaysia	1,392.4	24.7
Indonesia	981.5	17.4
Benin	451.5	8.0
Nigeria	286.0	5.1
Saudi Arabia	226.7	4.0

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

The top two countries as origin of the Thailand agricultural imports are also the same with the other three being totally different, namely Pakistan, Maldives, Niger (Table 4.51). The share of the first two countries being 76.1 percent reflects a much higher concentration than the agricultural exports of the country. However the total value of the top 5 import products is lower than 1 billion USD, thus the concentration does not mean a concern for Thailand.

4.5.2. Agricultural Trade Policies in Thailand

Background

Thailand is a founding member of ASEAN, comprising 10 countries in the region.[14] Founded in 1967 as an association between Southeastern Asian Nations, ASEAN is currently one of the most successful and large trading blocs in the world and it is moving ahead towards greater economic integration, Thailand closely follows the trading bloc in signing the bilateral free trade agreements (FTAs). Currently, Thailand is part of free trade agreements with 48 countries worldwide, including 20 OIC member countries (Algeria, Bangladesh, Benin, Bolivia, Brunei Darussalam, Cameroon, Egypt, Guinea, Guyana, Indonesia, Iran, Iraq, Libya, Malaysia, Morocco, Mozambique, Nigeria, Sudan, and Tunisia) (WTO, RTA-IS).

[14] Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

Table 4. 51 Top 5 OIC Origin Countries of Thailand's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, million USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Indonesia	437.2	41.7
Malaysia	360.1	34.4
Pakistan	80.8	7.7
Maldives	41.4	3.9
Niger	40.7	3.9

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Creating the ASEAN Economic Community (AEC) has long been a target for the ASEAN. ASEAN Charter was put into effect in 2008 to achieve that. ASEAN finally created the ASEAN Economic Community (AEC) on December 31, 2015. This has an important effect on Thailand's economic policies, particularly its trade policy. ASEAN Economic Community 2025 Consolidated Strategic Action Plan (ASEAN, 2017) complements the AEC 2025 Blueprint as a single reference document in order to inform stakeholders of the key action lines to be implemented towards ASEAN economic integration from 2016 to 2025. Vision and Strategic Plan For ASEAN Cooperation In Food, Agriculture, and Forestry (FAF) (2016- 2025) is designed to guide ASEAN towards the attainment of the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), and together with the goals of UN Zero Hunger (ASEAN, 2015). ASEAN is an important world producer and supplier of grains, particularly rice, and the world's largest palm oil and natural rubber producer, raising a significant volume of livestock. ASEAN is also a major world producer and exporter of fish and related products. AEC intends to form a single market and production base in food, agriculture and forestry.

Three out of the seven priority areas and strategic thrust of the Vision and Strategic Plan for ASEAN Cooperation in FAF are directly related to agricultural trade policies:

- Enhance trade facilitation, economic integration and market access;
- Ensure food security, food safety, better nutrition and equitable distribution;
- Assist resource constrained small producers and SMEs to improve productivity, technology and product quality, to meet global market standards and increase competitiveness;
- Strengthen ASEAN joint approaches on international and regional issues affecting the FAF sector

ASEAN's recognizes external trade as a key driver of economic growth and prosperity. In order to reduce trade costs towards competitiveness, ASEAN decisively shows the way to eliminate trade hindering regulations and standards. It also attracts the attention to the need of sharing equitably the gains with SMEs by avoiding their exclusion from the trade policies to be put in place. The related action programmes intend elimination of NTBs, harmonization of accreditation, inspection and certification as well as of standards and regulations, establishing business linkages among the potential agricultural cooperatives and farmers' organization, integration of all major ASEAN food markets, strengthening of food trading system to provide stable food supplies.

Tariffs

Pursuing the trade liberalization under the ASEAN Free Trade Area (AFTA) and the following ASEAN Trade in Goods Agreement (ATIGA), merchandise trade is nearly duty-free with quantitative and non-tariff barriers removed (WTO, 2015). In addition, WTO (2015) for

Thailand states that the country has a good record of notifications to the WTO. However, notifications related to domestic support in agriculture were remaining at the time the report was published. Thailand recovered this in 2017 and notified WTO regarding domestic support related to agriculture for the years 2014, 2015 and 2016. This is a clear evidence of Thailand's intention of liberalizing its trade and fulfilling the WTO requirements.

The top 5 import and export products of Thailand will be now looked at, concerning the tariff protection they are subject to. The sharp decrease in all the products average tariffs in Table 4.52 during the period considered is a result of both the country's decisiveness towards liberalizing its external trade while strengthening its competitiveness as well as its ASEAN membership, since the share of the trading block in the country's external trade is considerable. With regard to tariff rates for Thailand's top five import products from the top 5 OIC exporters, Table 4.52 presents the available data. The 2016 tariff rates demonstrate that tariff rates for oils, fats, waxe are lowest while the tariff rates for cereals are highest.

Table 4. 52 Tariffs Set by Thailand for Top 5 Import Products from the OIC Exporters, %

	03: Fish	09: Miscellaneous p.	41-42-43: Oils, fats, waxe	07: Coffee, tea, cocoa, spices	04: Cereals
2003	4.7	4.5	2.3	5.0	4.9
2014	2.6	0.0	0.0	0.0	0.3
2015	1.4	0.0	0.1	1.5	4.4

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note. Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Concerning the tariffs applied to Thailand's top 5 export products by the top 5 OIC importing countries, the highest tariff is applied to sugar, followed by cereals, those two products being considered strategic worldwide (Table 4.53).

Table 4. 53 Tariffs Set by OIC Countries for Thailand's Top 5 Export Products, %

	04: Cereals	06: Sugars	23: Crude rubber	03: Fish	05: Vegetables, fruit
2016	9.8	13.5	0.0	3.1	1.6

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note. Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

NTMs

Table 4.54 summarizes the numbers of NTMs that have been imposed by Thailand and that are currently in force. In animal products, nearly 90 percent of animal products are subject to NTMs and this ratio is 80 percent in vegetables, 90 percent in Food products and 100 percent in hides and skins. The wood products are the less protected category by NTMs.

Table 4. 54 NTM Types and NTM Affected Products, Thailand

Sector	NTM Type	Share %	Count
Animal	1 type	2.4	8
Animal	2 types	0.3	1
Animal	3+ types	84.8	285
Animal	No NTMs	12.5	42
Vegetable	1 type	0.3	1
Vegetable	2 types	2.8	10
Vegetable	3+ types	77.3	272
Vegetable	No NTMs	19.6	69
Food Products	1 type	1.0	2
Food Products	2 types	0.5	1
Food Products	3+ types	88.6	187
Food Products	No NTMs	10.0	21
Hides and Skins	No NTMs	100.0	69
Wood	1 type	34.5	81
Wood	2 type	1.3	3
Wood	No NTMs	64.3	151

Source: WITS

Table 4. 55 NTM Coverage and Frequency Ratios in Agricultural Products, Thailand

Code	Sector	CR	FR	Count
A	Animal	95.4	85.4	258
B	Animal	98.2	94.7	286
C	Animal	0.01	0.3	1
E	Animal	9.6	1.0	3
F	Animal	98.0	94.4	285
A	Vegetable	76.0	81.3	274
B	Vegetable	76.1	83.4	281
C	Vegetable	1.6	3.6	12
E	Vegetable	29.0	6.8	23
F	Vegetable	75.4	79.2	267
H	Vegetable	1.8	2.1	7
P	Vegetable	8.6	7.8	26
A	Food Products	59.2	85.2	179
B	Food Products	88.3	90.0	189
E	Food Products	7.2	3.8	8
F	Food Products	54.5	87.6	184
P	Food Products	28.2	9.8	20
A	Wood	22.5	10.7	25
B	Wood	8.1	25.3	59
E	Wood	0	1.3	3

Source: WITS
Note: A: Sanitary and phytosanitary measures, B: Technical barriers to trade, C: Pre-shipment inspection and other formalities, F: Charges, taxes and other para-tariff measures, G: Finance Measures, P: Export related measures

Trade agreements and cooperation

Other agreements or arrangements for cooperation are Asia-Pacific Economic Cooperation (APEC) with "open regionalism" as objective but without the creation of a free trade area. APEC aims unilateral targets for liberalization and improvement of the quality of customs procedures

and standards as well as subsidies and contingency measures. Thailand joins APEC's voluntary target of free and open trade.

Another arrangement is the Asia-Europe Meetings (ASEM), as informal dialogues and cooperation programmes (48 European and Asia-Pacific partners). A Trade Facilitation Action Plan (TFAP) is planned, wth the aim of diminishing NTBs, increasing transparency, and promoting trade.

Thailand participates also in other subregional groups such as the Greater Mekong Subregional Economic Cooperation programme, the Ayeyawady-Chao Phraya-Mekong Economic Strategy (ACMECS), the Indonesia-Malaysia-Thailand Growth Triangle and the Asia Cooperation Dialogue. All three groups cover agricultural trade in their key cooperation areas.

4.6. Brazil

Brazil is an upper middle income country with a GDP of 2.1 trillion USD and 9,821 USD per capita income in 2017. Brazil ranks 9th in GDP (PPP) and 183th in real growth rate among a total of 230 countries. The average rate of GDP growth in Brazil between 2010 and 2016 has been 1.4%. The country has been in a recession from 2015 to 2016, corresponding to the worst economic performance of the country's history. In 2016, Brazil's GDP growth rate has been -3.6%, inflation rate has been 8.7%, and unemployment rate has been 11.3%.

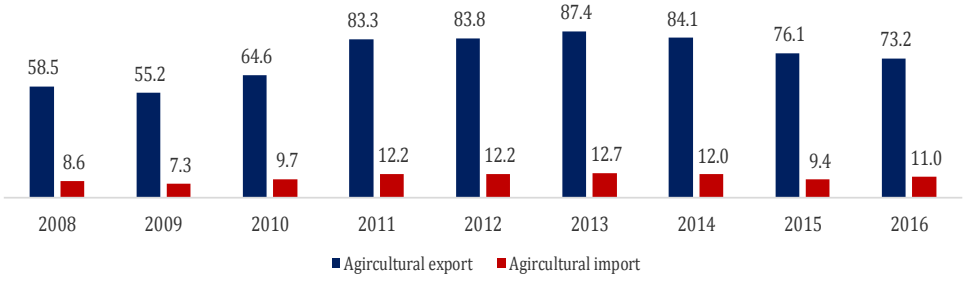
Brazil has the 6th largest labor force in the world, and she has an agricultural sector with a 10.2% employment share of the country's working population in 2016. The agricultural sector accounts for 5.5% of the country's GDP with a value of 98.8 billion USD. A world leader in the production of sugar, coffee, and orange juice, Brazil is the largest agricultural exporter in South America, and among the largest agricultural exporters in the world.

Table 4. 56 Share of Agriculture in GDP, Employment and Trade, Brazil

Year	% share in GDP	% share in employment	% share in exports	% share in imports
2008	4.6	17.5	27.9	5.0
2009	4.5	17.0	35.3	5.7
2010	4.1	16.0	31.6	5.3
2011	4.3	15.7	32.0	5.4
2012	4.2	11.5	34.1	5.4
2013	4.5	11.2	35.3	5.3
2014	4.3	10.4	37.0	5.3
2015	4.3	10.2	39.2	5.5
2016	4.9	10.2	38.4	7.8

Source: CEPII BACI, Eurostat RAMON, World Bank, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 60 Agricultural Exports and Imports, Billion USD, Brazil



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

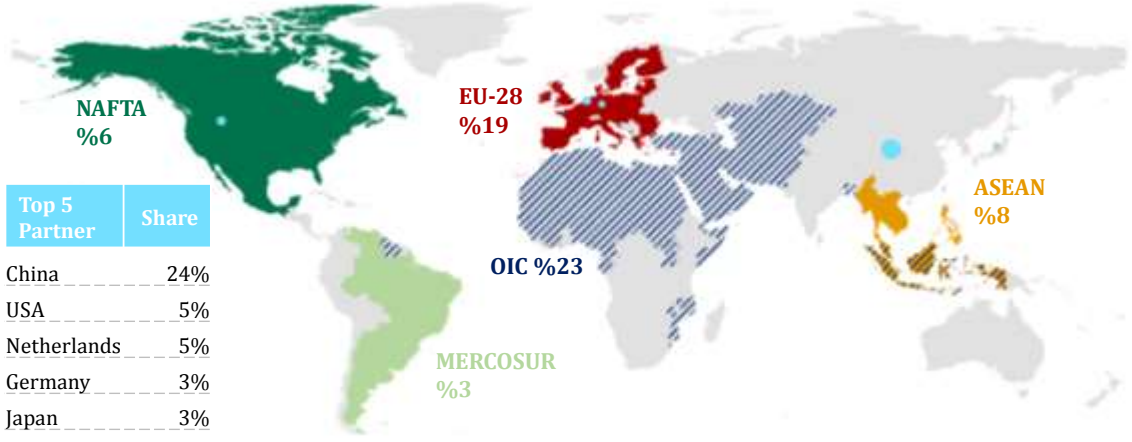
Within subgroups of agricultural products,

- Exports of agri-food products were 70.2 billion USD and imports of agri-food products were 8.9 billion USD with a trade surplus of 61.3 billion USD in 2016.
- Exports of fish products were 0.3 billion USD and imports of fish products were 1.2 billion USD with a trade deficit of 0.9 billion USD in 2016.
- Exports of agricultural raw materials were 2.7 billion USD and imports of agricultural raw materials were 0.9 billion USD with a trade surplus of 1.8 billion USD in 2016 (see Figure 4.61).

Figure 4. 61 Agricultural Exports and Imports, Product Groups, Billion USD, Brazil, 2016

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

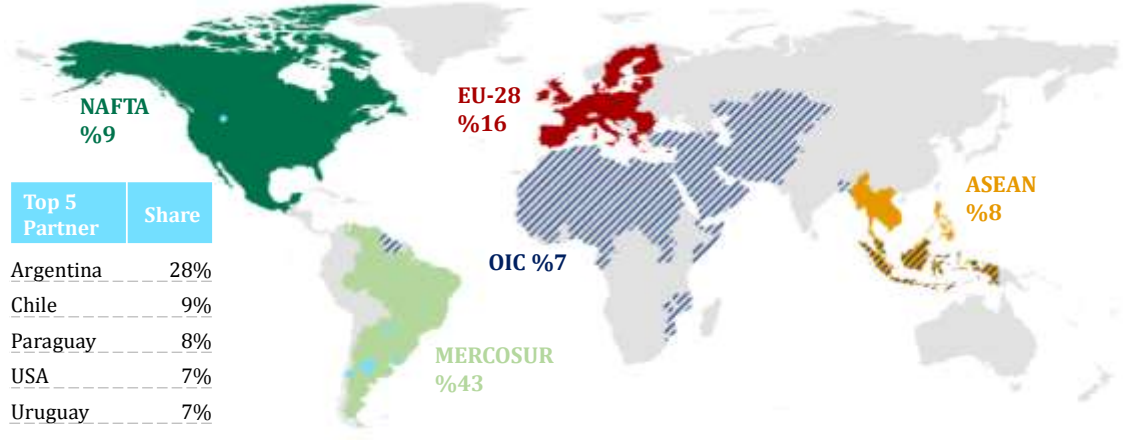
Figure 4. 62 Breakdown of Brazil's Agricultural Export Destinations, 2016



Top 5 Partner	Share
China	24%
USA	5%
Netherlands	5%
Germany	3%
Japan	3%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

Figure 4. 63 Breakdown of Brazil's Agricultural Import Origins, 2016



Top 5 Partner	Share
Argentina	28%
Chile	9%
Paraguay	8%
USA	7%
Uruguay	7%

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, authors' visualizations

4.6.1. Agricultural Trade with the OIC Countries

Table 4.57 presents the figures related to the agricultural trade flows of Brazil with OIC countries. Brazil's agricultural exports to OIC increased from 9.7 billion USD in 2008 to 17.2 billion USD in 2016 with a percentage share increase from 16.6% to 23.5%. Brazil has a trade surplus in agriculture, with the total value of its agricultural imports from OIC countries being smaller than its exports. The value of Brazil's agricultural imports from OIC countries has been within the range of 0.7 billion USD to 1.5 billion USD during the 2008-2016 period. The percentage share of agricultural imports declined from 10.3% in 2008 to 7.5% in 2016. The decline of agricultural imports from 1.3 billion USD in 2012 to 0.8 billion USD in 2016 reflects the recession period of the Brazillian economy from 2014 to 2016, and the depreciation of Brazillian Real during the period of 2012-2016.

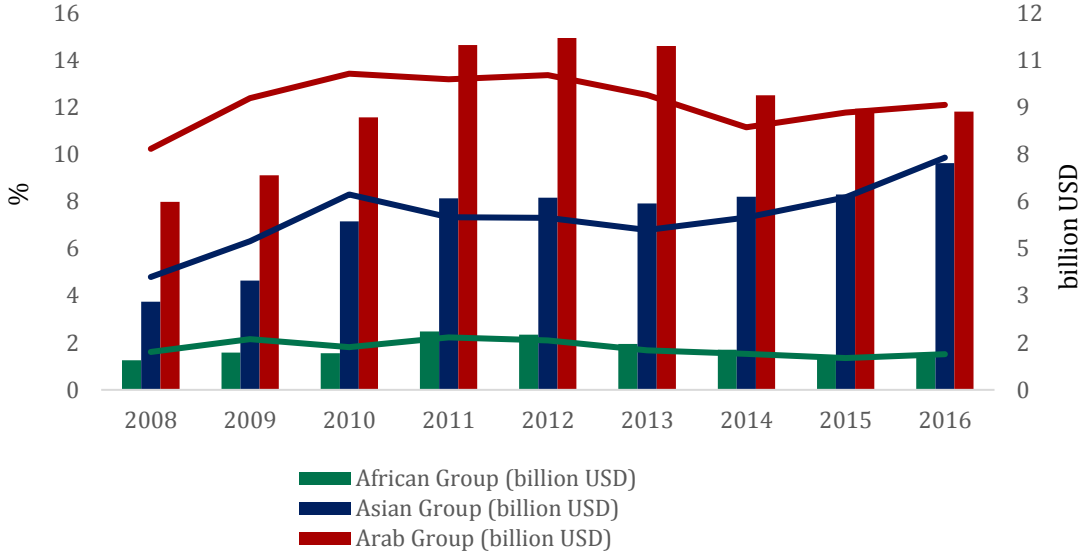
Table 4. 57 Value & Share of OIC Countries in Brazil's Agricultural Trade

Year	Value (exports) billion USD	Share in Brazil's total agricultural exports, %	Value, (imports) billion USD	Share in Brazil's total agricultural imports, %
2008	9.7	16.6	0.9	10.3
2009	11.5	20.8	0.7	9.5
2010	15.2	23.5	1.2	12.1
2011	18.9	22.7	1.5	12.5
2012	19.1	22.8	1.3	10.3
2013	18.3	21.0	0.9	7.4
2014	16.8	20.0	1.0	8.4
2015	16.2	21.3	0.8	8.2
2016	17.2	23.5	0.8	7.5

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.64 illustrates the distribution of Brazil's agricultural exports according to the three OIC country groups.

Figure 4. 64 Share Of OIC Groups In Brazil's Agricultural Exports

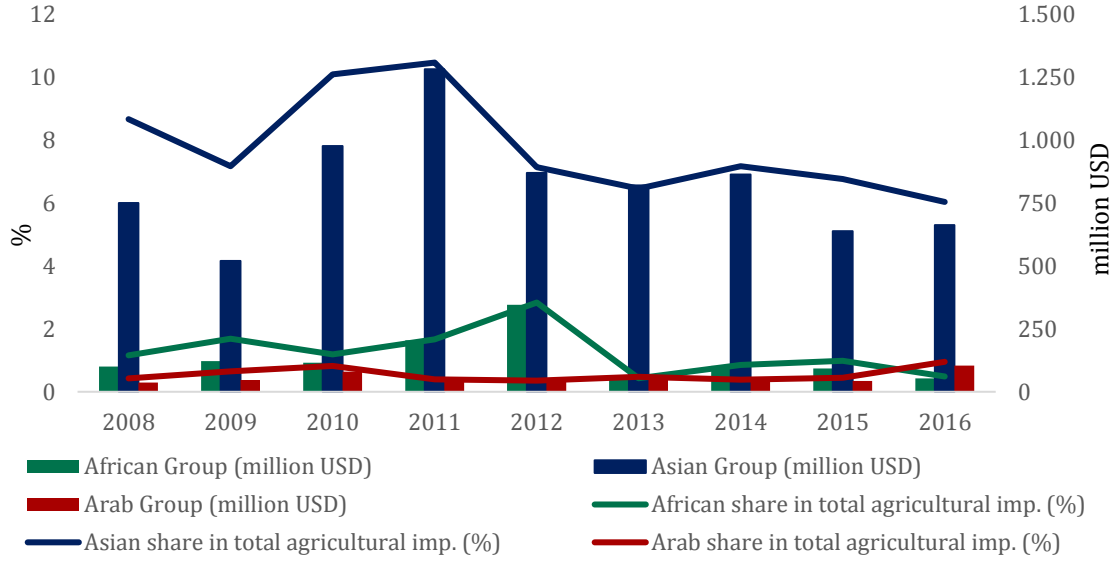


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Exports to the Arab group increased from 6 billion USD in 2008 to 8.9 billion USD in 2016, representing an increase in share from 10.2% to 12.1% from 2008 to 2016. The Arab group has the largest share in agricultural exports, followed by the Asian and the African group. Exports to the Asian group increased from 2.8 billion USD in 2008 to 7.2 billion USD in 2016 (157% increase), with a percentage share increase from 4.8% to 9.9% during the 2008-2016 period. The African group's share has been relatively stable during the period, changing within the range of 1.3% to 2.2%.

Figure 4.65 illustrates the distribution of Brazil's agricultural imports according to the three OIC country groups. The percentage share of imports from the African group has been within the range of 0.4% and 2.8% during the 2008-2016 period. The share of Brazil's agricultural imports from the Arab group has been relatively stable throughout the period, reflecting a percentage share of 0.5% to 1%. The Asian group has the largest share in Brazil's agricultural imports, but the share is declining. The share of the Asian group in total imports decreased from 8.7% in 2008 to 6% in 2016. The value of total imports from the Asian group decreased from 750 million USD to 660 million USD from 2008 to 2016, after reaching a peak of 1.3 billion USD in 2011. The sharp decline after 2011 reflects the depreciation of Brazillian Real, and Brazil's weak economic performance.

Figure 4. 65 Share of OIC Groups in Brazil's Agricultural Imports

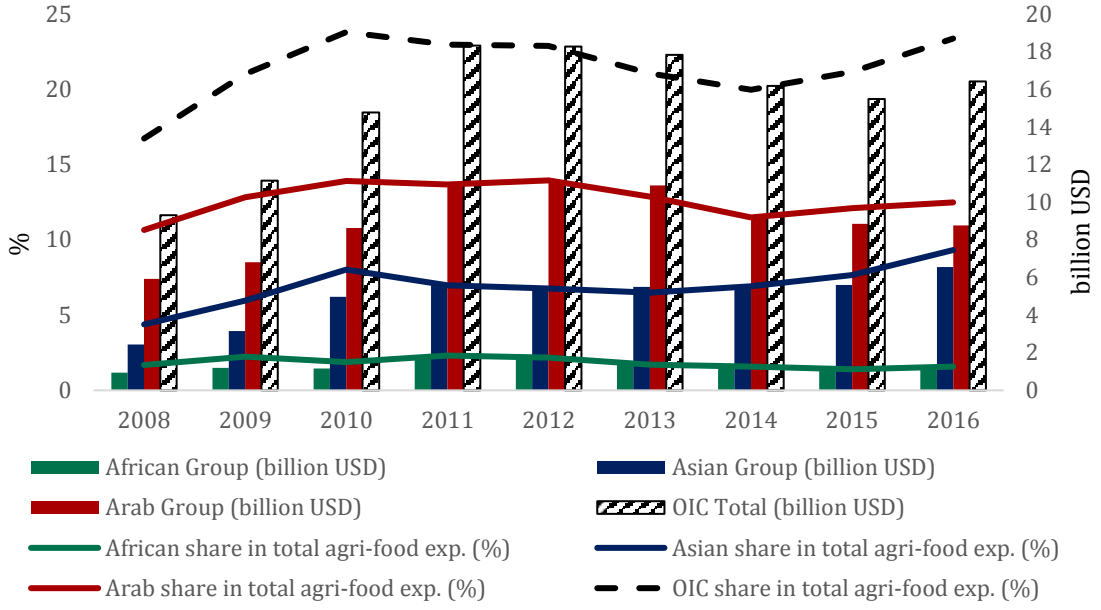


Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

General overview

Figure 4.66 presents the agri-food product exports of Brazil with respect to country groups. OIC countries are becoming a significant market for Brazil's agri-food product exports, with its share increasing from 16.7% in 2008 to 23.4% in 2016. The share of exports to the Arab group has increased from 10.7% to 12.5% during the 2008-2016 period. The value of exports to the Asian group increased from 2.4 billion USD to 6.5 billion USD (171% increase). The corresponding share has increased from 4.4% to 9.3% within the period. The share of the African group was within a range of 1.4% to 2.3%, reflecting the smallest share of the three country groups.

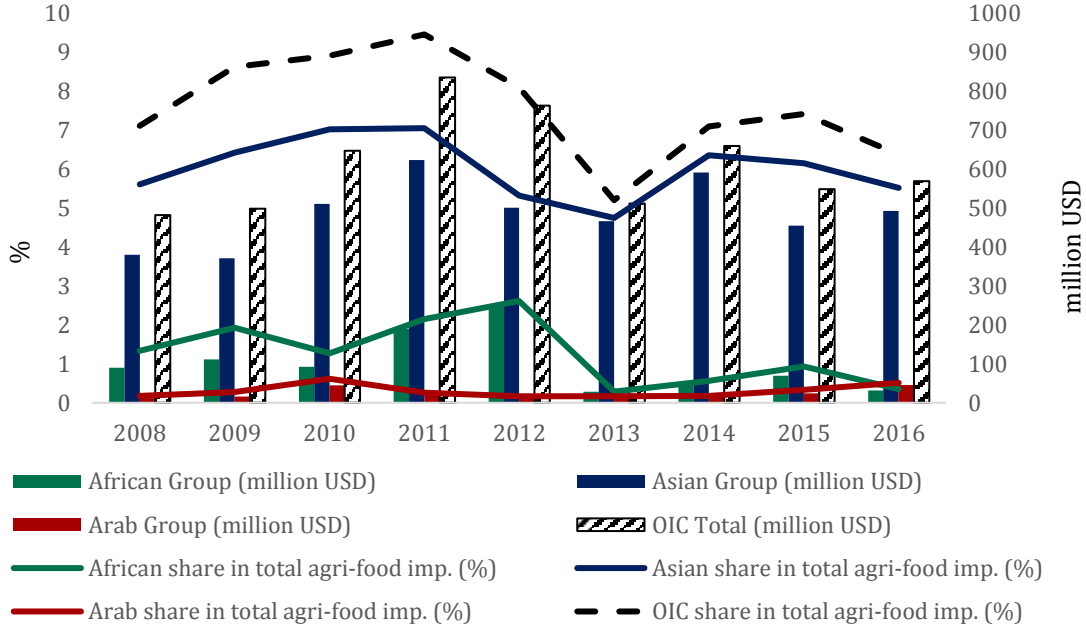
Figure 4. 66 Exports of Brazil's Agri-Food Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

With regards to the distribution of imports across country groups and product groups, Figure 4.67 shows that the Asian group has the highest share of OIC countries in Brazil's imports of agri-food products. The Asian group's share has been within the range of 4.7% to 7% during the period of 2008-2016. The African group's share declined from 1.3% in 2008 to 0.3% in 2016. The Arab group's share has been relatively stable, remaining within the range of 0.2% to 0.7%.

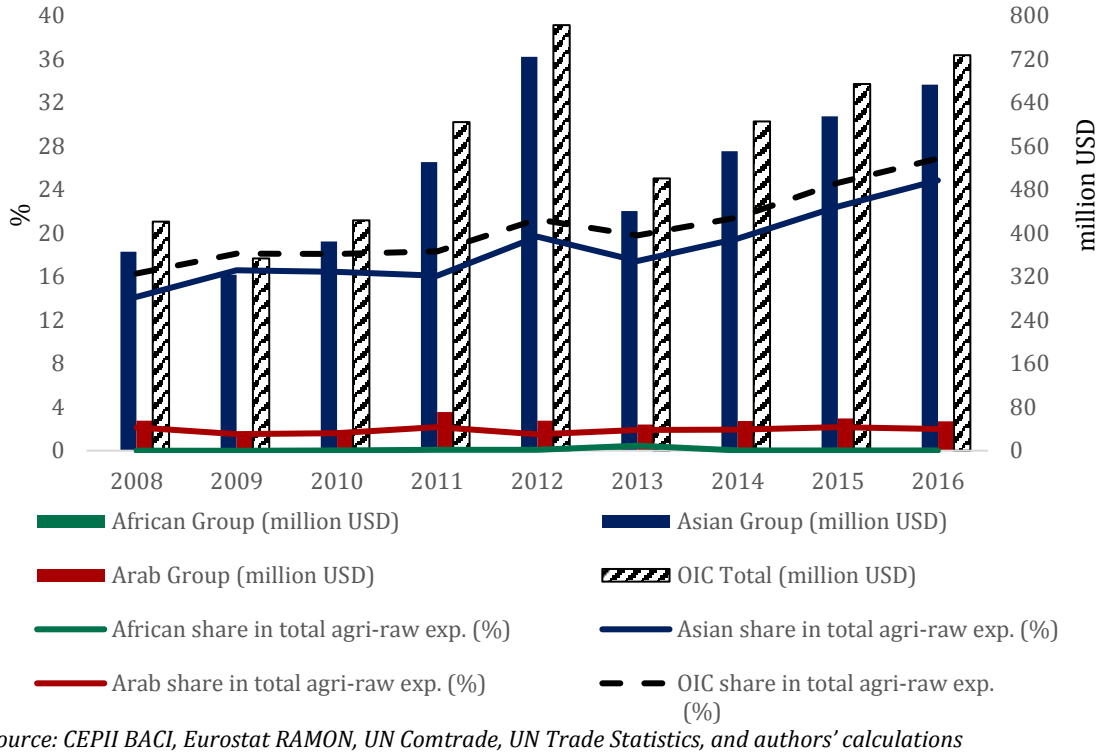
Figure 4. 67 Imports of Brazil's Agri-Food Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.68 demonstrates the distribution of agricultural raw material exports of Brazil across country groups. The share of African group in Brazil's agricultural raw material exports is very small. The Asian group has the highest share in exports of agricultural raw materials among the three country groups with an increase from 14.1% to 24.9% during the 2008-2016 period. The Arab group's share has been within the range of 1.5% to 2.5% throughout the period, reflecting a stable but small share in Brazil's total agricultural raw material exports.

Figure 4. 68 Exports of Brazil's Agricultural Raw Materials to the OIC Groups



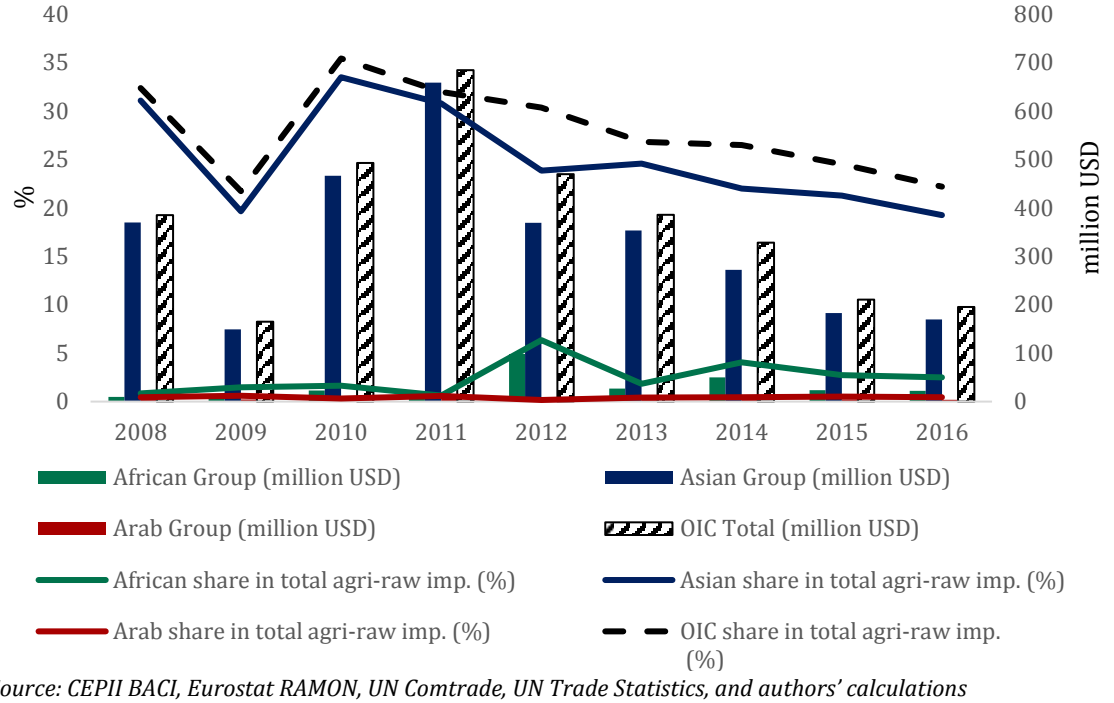
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4.69 shows that Brazil's agricultural raw material imports from OIC countries were significantly affected by the global crisis in 2009, with a decline from 32.4% of total imports in 2008 to %21.7 in 2009. The Asian group has the highest share in total agricultural raw material imports of Brazil, however the share is declining. The Asian group's share declined from 32.4% in 2008 to 19.3% in 2016. The share of African group slightly increased from 0.6% to 2.5% during the period of 2008-2016. The Arab group's share in Brazil's agricultural raw material imports is very small.

With regards to fish products, the Arab group has the highest share in Brazil's total fish exports. The share of the Arab group in Brazil's total fish product exports increased from 1% in 2008 to 12.8% in 2016. Figure 4.70 shows that the shares of the African group and the Asian group are small in Brazil's fish exports.

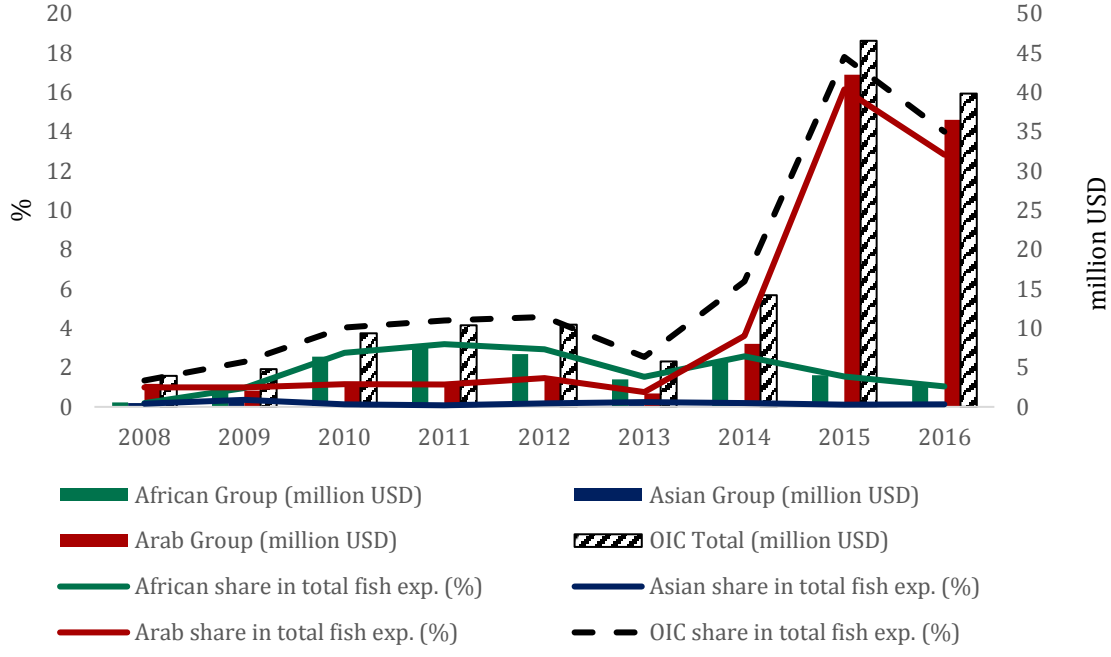
With regards to fish imports, the share of the Arab group accounts for roughly the whole fish import of Brazil from OIC countries, with a share of 4.7% in 2016. Figure 4.71 shows that the shares of the African group and the Asian group are very small.

Figure 4. 69 Imports of Brazil's Agricultural Raw Materials from the OIC Groups



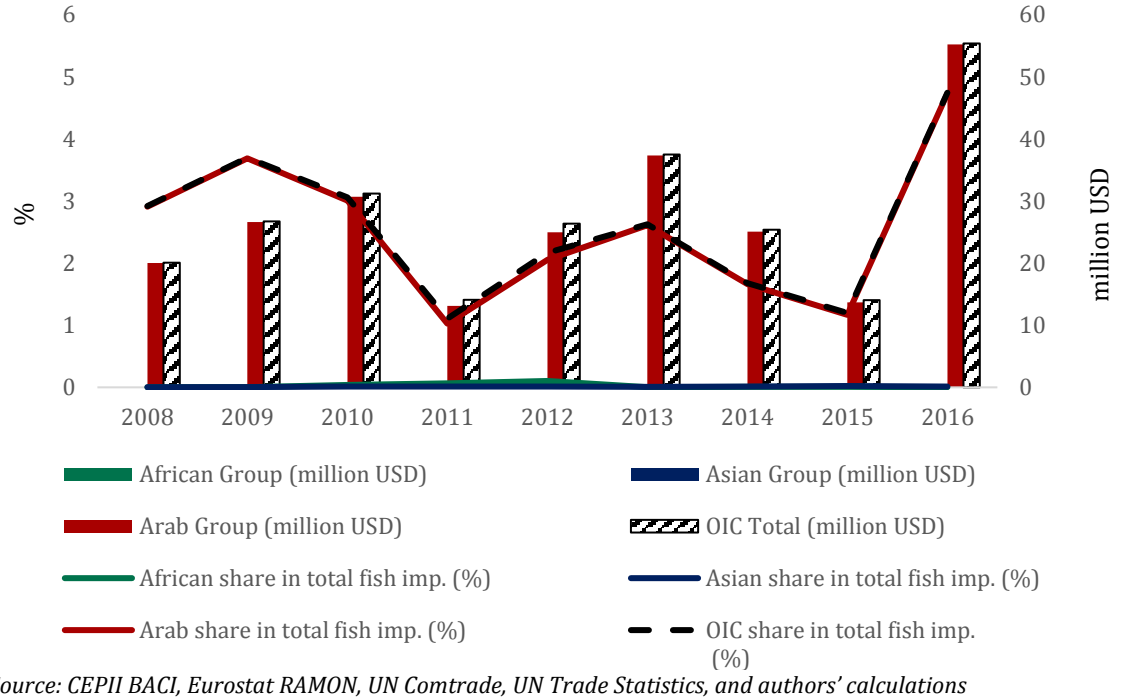
Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Figure 4. 70 Exports of Brazil's Fish Products to the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistic, and authors' calculations

Figure 4. 71 Imports of Brazil's Fish Products from the OIC Groups



Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

In summary;

- Brazil's weak economic performance after 2012 and the depreciation of Brazillian Real during the period affected its trade with OIC countries, declining the volume of Brazil's imports and exports.
- The Arab group has the highest share in Brazil's agri-food exports with a share of 12.5% in 2016, followed by the Asian group and the African group with respective shares of 9.3% and 1.6%.
- The Asian group has the highest share in Brazil's agri-food imports with a share of 5.5% in 2016, followed by the Arab and the African group with respective shares of 0.5% and 0.3%.
- The Asian group has the highest share in Brazil's agricultural raw material exports with a share of 24.9% in 2016, followed by the Arab and the African group with respective shares of 2% and 0%.
- The Asian group has the highest share in Brazil's agricultural raw material imports with a share of 19.3% in 2016, followed by the African group and the Arab group with respective shares of 2.5% and 0.4%.
- The Arab group has the highest share in Brazil's fish product exports with a share of 12.8% in 2016, followed by the African group and the Arab group with respective shares of 1% and 0.1%.
- The Arab group has the highest share in Brazil's fish product imports with a share of 4.7% in 2016, followed by the Asian and the African group with shares of 0% each.

Top 5 Agricultural export and import products of Brazil in the OIC Markets

According to the latest available three-year averages (2014-2016), the products that have the top five shares in Brazil's total agricultural exports to the OIC countries are (top 5 agricultural export products to the OIC):

06: Sugars
01: Meat
04: Cereals
08: Feeding stuff for animals
22: Oil-seeds

with percentage shares of 35.1%, 26.1%, 14.1%, 6.6%, and 5.2%, respectively.
With regards to Brazil's top agricultural imports from the OIC countries, according to the latest available three year averages (2014-2016), the products that have the top five shares in Brazil's total agricultural imports from the OIC countries are (top 5 agricultural import products to the OIC):

41-42-43: Oils, fats, waxe
23: Crude rubber
05: Vegetables, fruit
07: Coffee, tea, cocoa, spices
03: Fish

with percentage shares of 40.4%, 25.7%, 13.1%, 6.4%, and 3.7%, respectively.

The products in the two lists are mutually exclusive. The commonly exported products from OIC countries are not commonly imported by Brazil.

Table 4.58 shows the distribution of the total export value of the top 5 export products to the OIC countries according to destinations. The share of non-OIC countries in total OIC exports of top five agricultural export products declined from 80% in 2008 to 72.7% in 2016. The Asian group's share has shown the greatest increase during the observation period. The Asian group's share increased from 4.7% in 2008 to 10.7% in 2016 in total exports at the expense of non-OIC countries. The share of the Arab group slightly increased from 13.2% in 2008 to 14.7% in 2016, while the African group's share did not change much.

Table 4. 58 Distribution of Brazil's Top 5 Export Products, by Destination, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	2.0	4.7	13.2	80.0	100
2009	2.7	6.6	15.5	75.2	100
2010	2.4	9.7	17.2	70.7	100
2011	3.0	8.1	16.8	72.1	100
2012	2.7	7.6	16.9	72.8	100
2013	2.0	7.2	14.6	76.2	100
2014	1.9	7.9	13.4	76.8	100
2015	1.7	8.7	14.4	75.2	100
2016	1.9	10.7	14.7	72.7	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.59 shows the distribution of top 5 agricultural import products from the OIC countries according to the region of origin. Nearly all of Brazil's top agricultural product imports are from non-OIC countries, despite a slight decrease from 99.9% in 2008 to 99.3% in 2016. The major part of the slight increase in OIC countries' share came from the Asian group, with an increase from around 0% to 0.4% during the 2008-2016 period, while the shares of African and Asian groups did not change much.

Table 4. 59 Distribution of Brazil's Top 5 Import Products, by Origin, %

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.0	0.0	0.1	99.9	100
2009	0.8	0.0	0.3	98.9	100
2010	0.9	0.1	1.1	98.0	100
2011	1.4	0.1	0.3	98.2	100
2012	1.4	0.1	0.1	98.4	100
2013	0.2	0.1	0.1	99.5	100
2014	0.2	0.2	0.1	99.5	100
2015	0.5	0.4	0.0	99.1	100
2016	0.2	0.4	0.2	99.3	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.60 shows that Saudi Arabia is the largest importer of Brazil's top five agricultural products in the OIC market. The share of Saudi Arabia in the last available three-year average is 14.2%, while the second largest market (Iran) has a share of 11.7%. The third largest market is Egypt with a share of 10.7%, followed by the United Arab Emirates and Indonesia with their respective shares of 8.8% and 8%.

Table 4. 60 Top 5 OIC Destination Countries for Brazil's Top 5 Export Products

Importer OIC country	Value of agricultural exports to the country, billion USD, last 3-year average	% share in total agricultural exports to the OIC countries, last 3-year average
Saudi Arabia	2.1	14.2
Iran	1.7	11.7
Egypt	1.6	10.7
UAE	1.3	8.8
Indonesia	1.2	8.0

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table 4.61 shows the first five markets that Brazil purchases the top five import products. Indonesia is the largest market for Brazil's top five agricultural product imports from the OIC countries with a share of 64.8%, followed by Malaysia, Cote d'Ivoire, Turkey, and Morocco.

Table 4. 61 Top 5 OIC Origin Countries of Brazil's Top 5 Import Products

Exporter OIC country	Value of agricultural imports from the country, billion USD, last 3-year average	% share in total agricultural imports from the OIC countries, last 3-year average
Indonesia	0.5	64.8
Malaysia	0.1	12.3
Cote d'Ivoire	0.1	7.9
Turkey	0.1	7.2
Morocco	0.0	3.4

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

4.6.2. Agricultural Trade Policies in Brazil

Background

Trade policies in Brazil in terms of preferential trade agreements have been influenced by the Southern Common Market (MERCOSUR), Global System of Trade Preferences among Developing Countries (GSTP), Latin American Integration Association (LAIA), and Southern African Customs Union (SACU) policies. The free trade agreements are developed in parallel to the MERCOSUR's agreement with Southern African Customs Union (SACU). Currently, Brazil is part of free trade agreements with 51 countries worldwide including 19 OIC member countries (Algeria, Bangladesh, Benin, Cameroon, Egypt, Guinea, Guyana, Indonesia, Iran, Iraq, Libya, Malaysia, Morocco, Mozambique, Nigeria, Pakistan, Sudan, Tunisia, and Turkey) (WTO, RTA-IS).

The Brazilian economy is mainly inward oriented, with exports and imports in goods and services representing about 25% of GDP. European Union continues to be Brazil's main supplier and a key destination market, although in 2015 China became the single most important destination for Brazilian merchandise exports (WTO, 2017b).

According to the WTO 2017 Trade Policy Review, the country is undertaking trade reform initiatives to support growth. Those are trade facilitation, anti-dumping, production and trade incentives (e.g., SME support), state-owned enterprises, energy, manufacturing, transport infrastructure, and more being under consideration.

The tariff are still Brazil's main trade policy instrument. Brazil applies the MERCOSUR Common External Tariff (CET), with some country-specific derogations. Brazil bound its entire tariff during the Uruguay Round at rates between zero and 55% for agricultural products (WTO definition). The gap between the average bound and applied rates is some 18.5 percentage points (WTO, 2017b).

Brazil's applied tariff rates to its top 5 agricultural product groups imported from the top 5 OIC exporters vary between 4 percent (crude rubber) and 20.3 percent (vegetables, fruit), the last one having increased during the last three years. Such an increasing trend is not observed in the other 4 product groups Table 4.62).

Table 4. 62 Tariffs Set by Brazil For Top 5 Import Products from the OIC Exporters, %

	41-42-43: Oils, fats, waxe	23: Crude rubber	05: Vegetables, fruit	07: Coffee, tea, cocoa, spices	03: Fish
2014	10.0	4.0	15.6	12.0	10.6
2015	11.0	4.0	16.2	12.0	10.4
2016	10.9	4.0	20.3	11.6	10.0

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note. Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Table 4. 63 Tariffs Set by OIC Countries for Brazil's Top 5 Export Products, %

	09: Miscellaneous p.	41-42-43: Oils, fats, waxe	08: Feeding stuff for animals	02: Dairy	11-12: Beverages, tobacco
2016	15.7	20.0	-	9.9	19.4

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note. Top 5 products are identified considering 3 year average between 2014 and 2016 and ad valorem equivalent (%) rates are considered for applied tariff rates.

Brazil's top 5 export product groups to the OIC countries are subject to average tariffs varying between 9.9 percent (dairy products) and 20 percent (oils, fats, waxe) (Table 4.63).

Tables 4.64 and 4.65 show the place of NTMs in Brazil's agricultural trade. In the former table, NTM types and product shares and counts affected from NTMs are shown. Vegetables and food products are the categories most highly protected by NTMs, while wood products are the least. Around 75 percent of animal products and hides and skin imports are subject to NTMs.

Table 4. 64 NTM Types and NTM Affected Products, Brazil

Sector	NTM Type	Share %	Count
Animal	**1 type**	20.8	70
Animal	**2 types**	22.9	77
Animal	**3+ types**	31.0	104
Animal	**No NTMs**	25.3	85
Vegetable	**1 type**	6.8	24
Vegetable	**2 types**	1.4	5
Vegetable	**3+ types**	85.8	302
Vegetable	**No NTMs**	6.0	21
Food Products	**1 type**	4.3	9
Food Products	**2 types**	11.4	24
Food Products	**3+ types**	77.3	163
Food Products	**No NTMs**	7.1	15
Hides and Skins	**1 type**	33.3	23
Hides and Skins	**2 types**	31.9	22
Hides and Skins	**3+ types**	8.7	6
Hides and Skins	**No NTMs**	26.1	18
Wood	**1 type**	9.4	22
Wood	**2 types**	33.2	78
Wood	**No NTMs**	57.5	135

Source: WITS

All animal products' imports are subject to NTMs in the form of sanitary and phyto sanitary measures as well as technical barriers to trade in addition to their exports benefiting from export related measures. The other NTMs are insignificant in animal products imports. For vegetables, all imports are subject to phyto sanitary measures as well as technical barriers to trade. Food products are also highly protected by those two types of NTMs in addition to two third being protected by pre-shipment inspection and other formalities. Hides and skins are also protected, the most liberal product category being wood products.

4.7. Conclusions and Lessons Learned

Several messages emerge from the case study analyses presented in this chapter. This concluding section is devoted to a summary of these results and lessons. Table 4.66 presents a summary of what is learned from the case studies presented above.

A general overview of the case study countries

The analysis of the country-level data and especially the data on disaggregated agricultural trade flows indicate that the OIC countries generally differ in geography, climate conditions and product spectrum for which they have comparative advantage in global markets. Besides, the OIC countries also exhibit some variation in export and import shares of OIC versus non-OIC destinations and origins and in their agricultural export and import shares in three OIC groups. The situation is reflected in the selected country case studies as well, as described below.

Table 4. 65 NTM Coverage and Frequency Ratios in Agricultural Products, Brazil

Code	Sector	CR	FR	Count
A	Animal	100.0	100.0	181
B	Animal	100.0	99.5	180
C	Animal	0.4	1.7	3
D	Animal	0.4	1.7	3
E	Animal	0.4	1.7	3
P	Animal	100.0	100.0	175
A	Vegetable	100.0	100.0	307
B	Vegetable	100.0	100.0	307
C	Vegetable	68.8	68.4	210
E	Vegetable	29.2	0.7	2
P	Vegetable	100.0	100.0	301
A	Food Products	99.6	98.4	185
B	Food Products	100.0	100.0	188
C	Food Products	13.7	14.4	27
E	Food Products	8.7	2.1	4
O	Food Products	10.6	5.3	10
P	Food Products	90.8	96.1	171
A	Hides and Skins	5.4	45.9	28
B	Hides and Skins	97.9	83.6	51
P	Hides and Skins	0.3	9.8	6
A	Wood	16.2	44.8	99
B	Wood	11.3	35.3	78
E	Wood	0.3	0.5	1

Source: WITS
Note: A: Sanitary and phytosanitary measures, B: Technical barriers to trade, C: Pre-shipment inspection and other formalities, F: Charges, taxes and other para-tariff measures, G: Finance Measures, P: Export related measures

For the two African countries, the role of agricultural sector in the economy is different from each other with regards to shares in GDP, employment and exports. In Chad, agricultural sector is important in providing livelihoods, yet with share in exports being very small. The country's main aim is to feed its population and, obviously, its agricultural sector has such a priority. This is clearly the main reason of export duties. Yet, considering fast population growth, stagnating exports during the last five years and increasing imports should be providing sufficient reasons

to revise the agricultural trade policies. Specifically, trade policies promoting intra-OIC trade could contribute to the welfare of the Chad population, decreasing the costs of imports to the country while increasing the chance of agricultural producers in reaching the export markets. For the other African case study, the Gambia, the share of agricultural population is lower than that of Chad. In Gambia, a lower percentage of population depend on agricultural sector for livelihoods, yet the share of agricultural products in total exports is high, however with fluctuating percentage shares across the years. The Gambia faces high tariff rates for their top five export products in agriculture from their top five OIC importers. Reduction of tariffs in the OIC markets would enable the Gambia to increase its exports, thus contributing to the welfare of the country.

The share of agricultural exports is relatively lower in Turkey and Morocco when compared with the other two OIC case countries. Both in Turkey and in Morocco, the agricultural sector's share is relatively smaller than the African case study countries. In Turkey, tariffs in agriculture are typically larger than tariffs in non-agricultural sectors. The usual case of tariffs in agriculture being larger than tariffs in non-agricultural sectors is also observed for Morocco.

Smaller shares of agriculture in GDP in Turkey, Morocco and the Gambia are indications that there is a room for growth in services (such as tourism in the Gambia) and industry (such as agri-food industry in Morocco and Turkey). Promotion of agricultural production and intra-OIC trade of agricultural products for use as inputs in the value chains of the services and industry can be a policy alternative in Morocco and Turkey in order to create high value added products. Agri-food industry and tourism offer a wide range of possibilities for the use of agricultural inputs and these agricultural inputs (raw materials) can be supplied from the OIC markets. More emphasis should be given to integrate agricultural products into the value chains of agri-food industry and tourism, thereby creating new potential to use a variety of agricultural inputs from the OIC countries, providing possibilities to create innovative and high value added products. The high value products can have inputs supplied from a wide variety of OIC markets representing a diverse set of alternative possibilities.

With regards to the cases of non-OIC countries (Thailand and Brazil), it is observed that the share of agriculture in GDP is generally lower than the OIC sample cases, with the exception of Turkey. The share of agricultural employment is lowest in Brazil while the share of agricultural exports is high. In Thailand, the export share of agriculture is lower than the OIC cases, again with the exception of Turkey and Chad. A world leader in the production of sugar, coffee, and orange juice, Brazil is the largest agricultural exporter in South America, and among the largest agricultural exporters in the world. Thailand is a large exporter with a surplus both in its overall trade and in agriculture.

Top agricultural export and import products in the OIC market

The case study countries differ with regards to their top export and import products in the OIC agricultural markets. In Section 3.4 of this report, five potential product divisions for promoting intra-OIC trade were selected. These products are live animals, meat, sugar, feeding stuff for animals and oil seeds. It is possible to observe these products among the top export items of the case study countries. For example, feeding stuff for animals and sugar for Morocco; feeding stuff for animals for the Gambia; oil seeds, feeding stuff for animals and live animals for Chad; sugar for Thailand; and sugar, meat and feeding stuff for animals for Brazil are among the top export items for the OIC market. Turkey is the only case study that does not include any of the selected potential product divisions among her top export products in the OIC market.

With regards to the top import agricultural products from the OIC markets, the case study countries present a diverse set of commodities as well. Similar to the top export items, it is possible to observe the potential product divisions selected in Section 3.4 of the report for promoting intra-OIC trade. For example, oil seeds for Turkey; feeding stuff for animals for Morocco; and sugar for Chad are among the potential products for the promotion of intra-OIC trade. The Gambia, Brazil and Thailand's top import products do not include any of these selected potential products.

The export markets and import markets within the OIC present a diverse set as well. It seems that geography plays a large role in selection of export markets. For instance, judged by the top 5 markets, Turkey exports to Iraq, Syria, S. Arabia, Iran, Sudan; Morocco exports to Turkey, Lebanon, Cote d'Ivoire, Mauritania, Syria; the Gambia exports to Turkey, Lebanon, Cote d'Ivoire, Mauritania, Syria; Chad exports to Turkey, Indonesia, Nigeria, Bahrein, Egypt; Thailand exports to Malaysia, Indonesia, Benin, Nigeria, S. Arabia; and Brazil exports to S. Arabia, Iran, Egypt, UAE, Indonesia. The selected countries' major export and import markets are non-OIC countries where the share of the non-OIC countries in exports range from 62% to 93% in 2016. The share of non-OIC countries in OIC imports presents a similar picture where the non-OIC share in case study countries' import of top 5 agricultural products range from 45% to 98% in 2016.

Agricultural trade policies

The review of agricultural trade policy measures indicates that, while countries generally lowered the applied tariff rates they impose in agricultural products in recent decades, there still are cases where high average applied tariff rates are observed for certain product divisions and products. For their top export products, the countries are faced with high tariff rates in the OIC market. For example, Turkey faces high tariff rates for beverages and tobacco exports in the OIC market. Morocco faces high tariff rates for its sugar exports since sugar is highly protected in the OIC markets along with oil seeds where Chad is faced with high tariff rates from the OIC countries. Consistent with the discussion in Chapter 3 of the report, the highest tariff protection in the OIC market is for oil seeds and sugar. Thailand is also impacted by the high tariff rates on sugar in the OIC market. There is a significant room for reducing the tariff rates on oil seeds and sugar.

Among the case study countries, there has been a reduction in tariff rates applied to the top imports originating from the OIC countries. For example, Turkey reduced tariff rates for coffee, oil seeds, vegetables & fruits; Morocco reduced tariff rates for vegetables and fruits, oils, fats, waxes, coffee, beverages and tobacco; the Gambia reduced tariff rates for beverages and tobacco; Chad reduced tariff rates for coffee, cereals, misc. products. Although the tariff reduction is a good sign for trade integration and promotion of free trade, the OIC countries' reduction in already high tariff lines is still in need for closer examination. On the contrary, the two non-OIC countries, Thailand and Brazil have already low levels of tariff protection where they reduced their tariff rates even more drastically.

The NTMs in certain product groups such as animals and vegetables are observed to have extremely high coverage ratios, e.g., larger than 95% or 99%, indicating that almost the entirety of trade in these products is affected by the existing NTMs.

The analysis of the trade agreement matrix along with the preferential tariffs and top trade partners show that not all case study countries are highly integrated with their top trade partners. The number of preferential trade agreements across the OIC countries is vast as demonstrated in previous sections of this report. For example, the number of preferential trade agreements with the OIC countries is 8, 16, 11, 2 for Turkey, Morocco, the Gambia and Chad. The

two non-OIC countries, Thailand and Brazil, have preferential trade agreements with 20 and 19 OIC countries, respectively. It is seen that a large number of preferential trade agreements were signed across the OIC countries as well as OIC and non-OIC countries. As stated above, the condition of large number of preferential trade agreements for a country may cause negative consequences known as the spaghetti bowl phenomena where multiple memberships to different regional trade agreements result in overlapping trade rules. This phenomenon is particularly seen in Africa, creating discriminating high tariffs applied by the OIC member states.

Another problem with the preferential trade agreements across countries is related to their potential role in further promotion of intra-OIC trade. The analysis presented in Section 3.4.1 presents potential country matches in order to promote intra-OIC trade in agricultural. The analysis is done with five selected product divisions for intra-OIC trade promotion (live animals, meat, sugar, feeding stuff for animals and oil seeds) and potential exporter and importer OIC countries. Among the matches, the case study countries were examined to see whether there are any existing preferential trade agreements with any of the potential partner countries. Turkey and the Gambia are potential importer for live animals. Among the potential exporters, Turkey has trade agreements with Malaysia and Morocco; the Gambia has a trade agreement with Burkina Faso. Morocco and the Gambia are potential importers of meat; however, neither country has any existing preferential trade agreement with potential exporters of meat. A similar result is seen for sugar and feeding stuff for animals where Morocco is a potential importer but does not have any ongoing trade agreement with any of the potential export partners. This mismatch loosely indicates that establishing free trade agreements with a top trade partner in agricultural trade would promote intra-OIC trade by exploiting the existing match of mutual benefit with larger trade volumes.

Agricultural reforms and innovative designs

The case study analyses also yield information on the design, implementation and impact of cases of agricultural reforms and other innovative market institutions. The Plan Vert or the Green Plan of Morocco is one such example where multi-faceted reform actions helped, with some success, the smallholders to integrate more strongly with global markets. Turkey's farmer registration system and e-commerce infrastructure services are examples of innovative market institutions for easing market access and information diffusion. A similar situation is seen in the case of the Gambia where the government of the Gambia prepared a policy paper under the National Development Plan (NDP) currently led by the Ministry of Finance. The Agricultural and Natural Resources (ANR) Policy (2017-2026) of The Republic of the Gambia aims for a favorable environment for agricultural producers with an objective of maximizing poverty reduction. The vision is a market led commercialized, efficient, competitive, dynamic ANR policy in the context of sustainable development.

Stakeholder perceptions on promoting intra-OIC agricultural trade

Finally, it should also be underlined that there exist strong expectations for new intra-OIC trade, investment and economic cooperation agreements that would be mutually beneficial to the involved parties. Related with this is the strong emphasis put on the crucial role of the TPS-OIC in establishing trade policy coherence across the OIC, and the overall understanding in the field is that the process should be accelerated to allow for timely operation of the TPS-OIC.

Table 4. 66 Summary Findings of the Case Study Analyses

	Turkey	Morocco	Gambia	Chad	Thailand	Brazil
Share of agriculture	GDP: 6.2% Employment: 19.5% Export: 11.0% Import: 7.2%	GDP: 12.0% Employment: 37.7% Export: 20.6% Import: 12.2%	GDP: 17.0% Employment: 27.2% Export: 83.1% Import: 32.7%	GDP: 49.5% Employment: 87.2% Export: 3.5% Import: 15.4%	GDP: 8.5% Employment: 33.3% Export: 15.5% Import: 8.3%	GDP: 4.9% Employment: 10.2% Export:38.4% Import: 7.8%
Top 5 agricultural export products to the OIC	Cereals and cereal preparations Vegetables and fruit Beverages and tobacco Animal and vegetable oils, fats and waxes Dairy products and birds' eggs	Fish Dairy products and birds' eggs Vegetables and fruit Feeding stuff for animals Sugars, sugar preparations and honey	Miscellaneous p. Animal and vegetable oils, fats and waxes Feeding stuff for animals Dairy products and birds' eggs Beverages and tobacco	Oil-seeds and oleaginous fruits Cotton Feeding stuff for animals Hides, skins and fur skins, raw Live animals	Cereals and cereal preparations Sugars, sugar preparations and honey Crude rubber Fish Vegetables and fruit	Sugars, sugar preparations and honey Meat and meat preparations Cereals and cereal preparations Feeding stuff for animals Oil-seeds and oleaginous fruits
Average share of non-OIC countries in exports of top 5 agricultural products (2008-2016)	63%	93%	62%	84%	78%	75%
Top 5 agricultural import products from the OIC	Animal and vegetable oils, fats and waxes Cotton Coffee, tea, cocoa, spices, and manufactures thereof Oil-seeds and oleaginous fruits Vegetables and fruit	Vegetables and fruit Animal and vegetable oils, fats and waxes Coffee, tea, cocoa, spices Feeding stuff for animals Beverages and tobacco	Animal and vegetable oils, fats and waxes Miscellaneous p. Cereals and cereal preparations Dairy Coffee, tea, cocoa, spices	Beverages, Tobacco Cereals and cereal preparations Miscellaneous p. Vegetables, fruit Sugars, sugar preparations and honey	Fish Miscellaneous p. Animal and vegetable oils, fats and waxes Coffee, tea, cocoa, spices Cereals and cereal preparations	Animal and vegetable oils, fats and waxes Crude rubber Vegetables and fruit Coffee, tea, cocoa, spices Fish
Average share of non-OIC countries in imports of top 5 agricultural products (2008-2016)	83%	89%	45%	56%	89%	98%
Top 5 OIC destinations	Iraq Syria S. Arabia Iran Sudan	Turkey Lebanon Cote d'Ivoire Mauritania Syria	Guinea-Bissau Senegal Mali Tunisia Mauritania	Turkey Indonesia Nigeria Bahrein Egypt	Malaysia Indonesia Benin Nigeria S. Arabia	S. Arabia Iran Egypt UAE Indonesia

	Turkey	Morocco	Gambia	Chad	Thailand	Brazil
Top 5 OIC countries of origin	Malaysia Cote d'Ivoire Turkmenistan Indonesia Nigeria	Egypt Tunisia Indonesia UAE Turkey	Malaysia Indonesia Senegal Pakistan Turkey	Cameroon Senegal Turkey Egypt UAE	Indonesia Malaysia Pakistan Maldives Niger	Indonesia Malaysia Cote d'Ivoire Turkey Morocco
Tariff rates applied to the top imported products originating from OIC	Highest for vegetables and fruits Tariff rates are reduced for oil seeds and oleaginous fruits	Highest for beverages and tobacco (approx. 20%) For other products, the tariff rates are generally low (0.3%-7.9%)	Highest for oils, fats, waxes (20%) Lowest for feeding stuff for animals (7%)	Highest for sugar and vegetables & fruit (30%) Lowest for beverages and tobacco (11%)	Considerably low tariff rates for the products coming from the OIC countries (highest 5%)	Highest for vegetables and fruits (20%); lowest for crude rubber (4%)
Change in tariff rates applied to the top imported products originating from OIC	Tariff rates declined for: coffee (from 29.2% to 20.5%), oil seeds (from 16.9% to 12.5%), vegetables &fruits (from 29.4-28.9)	Tariff rates declined for: vegetables & fruits (from 0.8% to 0.7%); oils, fats, waxes (from 4.5% to 3.0%); coffee (from 6.9% to 6.7%); beverages and tobacco (from 22.8% to 23.7%	Tariff rates declined for: beverages and tobacco (from 20% to 19.9%)	Tariff rates declined for: coffee (from 16.5% to 11.9%); cereals (from 21.1% to 18.7%); misc. pr. (from 14.9% to 12.3%).	Tariff rates declined for: fish (from 4.7% to 1.4%); misc. pr. (from 4.5% to 0%); oils, fats, waxes (from 2.3% to 0.1%); coffee (from 5% to 1.5%); cereals (from 4.9% to 4.4%)	Tariff rates declined for: Coffee (from 12.0% to 11.6); fish (10.6% to 10.0%).
Tariff rates applied by the OIC countries	Highest for beverages and tobacco	Highest tariff rates for sugars (80%) Lowest tariff rate for feeding stuff for animals	Highest for vegetables and fruits (14.6%)	Oil seeds (12.3%)	High tariff rates applied by the OIC countries. Highest on sugar (13.5% and cereals 9.8%)	High tariff rates applied by the OIC countries. Highest on oils, fats and waxes (20%), beverages and tobacco (19%). Lowest on dairy (9.9%)
Top 5 OIC destinations	Iraq Syria S. Arabia Iran Sudan	Turkey Lebanon Cote d'Ivoire Mauritania Syria	Guinea-Bissau Senegal Mali Tunisia Mauritania	Turkey Indonesia Nigeria Bahrein Egypt	Malaysia Indonesia Benin Nigeria S. Arabia	S. Arabia Iran Egypt UAE Indonesia
Top 5 OIC countries of origin	Malaysia Cote d'Ivoire Turkmenistan Indonesia Nigeria	Egypt Tunisia Indonesia UAE Turkey	Malaysia Indonesia Senegal Pakistan Turkey	Cameroon Senegal Turkey Egypt UAE	Indonesia Malaysia Pakistan Maldives Niger	Indonesia Malaysia Cote d'Ivoire Turkey Morocco

	Turkey	Morocco	Gambia	Chad	Thailand	Brazil
Tariff rates applied to the top imported products originating from OIC	Highest for vegetables and fruits Tariff rates are reduced for oil seeds and oleaginous fruits	Highest for beverages and tobacco (approx. 20%) For other products, the tariff rates are generally low (0.3%-7.9%)	Highest for oils, fats, waxes (20%) Lowest for feeding stuff for animals (7%)	Highest for sugar and vegetables & fruit (30%) Lowest for beverages and tobacco (11%)	Considerably low tariff rates for the products coming from the OIC countries (highest 5%)	Highest for vegetables and fruits (20%); lowest for crude rubber (4%)
Change in tariff rates applied to the top imported products originating from OIC	Tariff rates declined for: coffee (from 29.2% to 20.5%), oil seeds (from 16.9% to 12.5%), vegetables &fruits (from 29.4-28.9)	Tariff rates declined for: vegetables & fruits (from 0.8% to 0.7%); oils, fats, waxes (from 4.5% to 3.0%); coffee (from 6.9% to 6.7%); beverages and tobacco (from 22.8% to 23.7%	Tariff rates declined for: beverages and tobacco (from 20% to 19.9%)	Tariff rates declined for: coffee (from 16.5% to 11.9%); cereals (from 21.1% to 18.7%); misc. pr. (from 14.9% to 12.3%).	Tariff rates declined for: fish (from 4.7% to 1.4%); misc. pr. (from 4.5% to 0%); oils, fats, waxes (from 2.3% to 0.1%); coffee (from 5% to 1.5%); cereals (from 4.9% to 4.4%)	Tariff rates declined for: Coffee (from 12.0% to 11.6); fish (10.6% to 10.0%).
Tariff rates applied by the OIC countries	Highest for beverages and tobacco	Highest tariff rates for sugars (80%) Lowest tariff rate for feeding stuff for animals	Highest for vegetables and fruits (14.6%)	Oil seeds (12.3%)	High tariff rates applied by the OIC countries. Highest on sugar (13.5% and cereals 9.8%)	High tariff rates applied by the OIC countries. Highest on oils, fats and waxes (20%), beverages and tobacco (19%). Lowest on dairy (9.9%)
NTMs	Nearly 60% of animal products are subject to NTMs and this ratio is around 88% in vegetables and close to 100% in hides and skins.	Food products and vegetable are the main product categories that are being affected from the existence of NTMs.	Food products is the main product category that is being affected from the existence of NTMs. Half of the products in the animal category and vegetable category are impacted by NTMs.	NA	In animal products, nearly 90 percent of animal products are subject to NTMs and this ratio is 80 percent in vegetables, 90 percent in Food products and 100 percent in hides and skins. The wood products are the less protected category by NTMs.	100% animal products and food products are subject to NTMs

	Turkey	Morocco	Gambia	Chad	Thailand	Brazil
Preferential trade agreements	Turkey has FTAs currently "in force" with 8 OIC member countries.	Morocco has FTAs currently "in force" with 16 OIC member countries.	Gambia has FTAs currently "in force" with 11 OIC member countries.	Chad has FTAs currently "in force" with 2 OIC member countries.	Thailand has FTAs currently "in force" with 20 OIC member countries.	Brazil has FTAs currently "in force" with 19 OIC member countries.
Stakeholder perceptions on intra OIC trade promotion	There is a strong expectation that Turkey's trade relationships with fellow OIC countries are likely to be stronger in the near future. Establishing close agricultural trade relationships is a clear win-win situation both for Turkey and for the partner OIC country. Regional trade agreements within the OIC are assets and would serve as opportunities to facilitate higher volumes of intra-OIC agricultural trade.	Promoting intra-OIC agricultural trade emerges as an important agricultural trade policy objective to overcome with the problems of self sufficiency The OIC member countries should envision and take action for being partners in agricultural trade, not competitors.	The stakeholders express that the goodwill of the current Government is an opportunity for enhanced trade ties between The Gambia and many other OIC countries. Also, inauguration of Turkish Airlines direct flights into Banjul is considered to be a great opportunity for enhanced trade ties with the OIC countries, Istanbul as a hub.			

Source: Authors.

Chapter 5: Conclusion and Policy Recommendations

The review of agricultural trade policies in the OIC member countries presented in this report point to a number of conclusions and policy lessons, further supported by quantitative and qualitative results obtained in the study. These conclusions and lessons are closely linked to the effects of trade policy instruments such as tariff protection, NTMs, and trade agreements. Domestic policies also matter, however, as indicated by stakeholder responses to the online survey, as well as in-depth interviews and case studies conducted. All evidence commonly indicate, for example, that the structural problems faced by smallholder farmers pose significant challenges even in the largest agricultural exporters of the OIC.

This concluding section of the report presents a summary of quantitative and qualitative results obtained, and policy lessons drawn from these results. The section also discusses the policy recommendations to promote intra-OIC trade in agricultural products.

5.1. A Summary of the Results

The first thing that is obvious from a review of current policies is high tariff protection on critical product divisions and products which could potentially serve to increase intra-OIC agricultural trade. Sugars and oil seeds are two such product divisions where potential exporter countries face high applied tariffs imposed by potential importers within the OIC. The same situation applies to numerous products at the product level for the top export products of the OIC countries.

Another noteworthy result is the fact that some critical product divisions such as meat is not particularly prone to high tariff protection but still has a low share within OIC imports. Thus, NTMs may also be important in limiting intra-OIC agricultural trade in certain products.

A low propensity of trade agreements within the OIC and associated high propensity of trade agreements with non-OIC countries is clearly a factor that should be emphasized as a factor that adversely affects the volume of intra-OIC agricultural trade. While the OIC countries that are present members of ECOWAS or Pan-Arab Free Trade Area are more integrated than other OIC member countries in terms of the number of trade agreements currently in force, some OIC countries have only a few trade agreements with other OIC countries. The agreement coverage for the potential exporter-importer matches in most of the key product divisions is alarmingly low.

In addition to these quantitative results, the analysis and review also yielded some qualitative results that are illuminating in interesting ways. One such result is related with the significance of smallholder farming practices across the OIC. Fragmented lands pose a challenge for many OIC countries to increase agricultural productivity. As expected, the smallholder farmers have difficulties in accessing credit and information. These naturally lead to low or no interaction with global markets both because of the cost disadvantage and because of the lack of technical capabilities.

Another qualitative result worth mentioning is that there exists a common understanding among the stakeholders that cooperation and coordination among OIC member countries in the sphere of agricultural trade would be multilaterally beneficial.

It must be noted, however, that the OIC-wide analysis and review of policies in Chapter 3, and case studies in Chapter 4 indicate that there exist serious problems concerning data availability and data reliability in the realm of agricultural trade flows and agricultural trade policy measures (including both the tariff rates and the NTMs). More specifically, commonly

referenced international databases that collect and publish statistics on tariff rates and NTMs at product division and product levels do not cover the statistics of most recent years for many OIC countries.

5.2. A SWOT Analysis of Intra-OIC Agricultural Trade

Before proceeding to the emerging policy recommendations, a summary table of the SWOT analysis that has been carried out for intra-OIC trade in agricultural products is presented in this subsection. Trade promotion for a particular group of countries and products is a multi-faceted phenomenon at both extensive and intensive margins of trade. The design and implementation of effective agricultural trade policies through tariff measures, NTMs, and trade agreements are processes that should be complemented with policies that target the structural micro and macro problems for individual countries and for the group as a whole.

Table 5. 1 SWOT Analysis for Intra-OIC Agricultural Trade

General	**Strengths** • Members globally ranking among the top 20 producers of many agricultural products • Non-satiated domestic markets and increasing domestic demand for food • Suitable climate for agricultural production in most OIC members **Weaknesses** • Low value added in exports (unprocessed/raw or semi-processed) • Lack of insurance mechanisms against production and marketing risks **Opportunities** • Not fully tapped export markets for many agricultural products **Threats** • Low overall level of development of member economies • Political conflicts • Climate change • Similarity of the geography and factor endowments across countries • Poor renewable water resource endowments of many members
Production (General)	**Strengths** • Young population • Vast (but unevenly distributed) stock of arable lands • Wide range of product variety **Weaknesses** • Fragmented lands and scale problems • Generally low level of agricultural productivity • Poorly educated labor force • Low capacity to control the effects of weather on agricultural production **Threats** • Climate change • Increasing oil prices (for members that are net importers)

Production (Technology)	**Strengths** • Rapid and low cost information diffusion **Weaknesses** • Dominance of conventional production technologies in agriculture • Lack of efficient irrigation networks • Lack of support for R&D activities and innovation
Products (Hygiene)	**Weaknesses** • Lack of effective and enforceable regulations • Lack of testing labs for certification • Tendency to overuse chemical fertilizers and pesticides **Threats** • Sudden, unexpected changes in sanitary standards in the major export markets such as the EU
Products (Labeling)	**Weaknesses** • Lack of or low level of product standards / standardization **Opportunities** • Halal certification • Geographical labeling
Products (Organic)	**Strengths** • Great production potential in some geographic regions **Opportunities** • Increase in global demand for organic products
Marketing (General)	**Weaknesses** • Lack of efficient marketing channels • Lack or poor condition of processing and packaging facilities • Similarity of products limiting potential for increasing intra-OIC trade **Threats** • Trade wars
Marketing (Consumer Behavior)	**Weaknesses** • Lack of investment in product development **Opportunities** • Diversifying consumer tastes • Increasing demand for fast (served) food • Increasing demand for healthy (organic) food **Threats** • Diversifying consumer tastes
Marketing (Distribution)	**Strengths** • Potential for direct marketing (family businesses) **Weaknesses** • Lack of efficient transportation networks, poor state of logistics infrastructure

The SWOT analysis summarized in Table 5.1 focuses on (i) production (in general and with a particular emphasis on technology), (ii) products (hygiene issues, organic products and labeling), (iii) marketing (consumer behavior and distribution), and, finally, (iv) export potential (access to new markets).

Table 5.1 SWOT Analysis for Intra-OIC Agricultural Trade (continued)

Export potential (Access to new markets and potential for increasing intra-OIC trade)	**Strengths** • Shared borders by a large majority of member countries • Cultural affinity • Existing regional blocks such as ECOWAS involving OIC and non-OIC partners together, or all-OIC arrangements such the Pan-Arab agreement • Existing agricultural trade networks within the OIC with identified export and import hubs • Existing legal structure regarding the Trade Preferential System within the OIC **Weaknesses** • Lack of experience in finding and entering new markets • Intra-OIC competition in third party markets due to similarity of products • Visa issues and other trade costs **Opportunities** • Increasing product variety • Existence of products such as meat that are not subject to tariff protection • Existence of potential trade achievable through tariff reductions and trade agreements • Existence of COMCEC/COMCEC Agriculture/Trade Working Group(s) as a forum for regular contact **Threats** • Existence of trade agreements with non-OIC partners / membership in regional blocks etc. involving neighboring countries that are not OIC members

Source: Authors.

5.3. Emerging Policy Recommendations

Formation of three Free Trade Areas for tariff-free trade in agricultural products in each of the three regional divisions within the OIC would be a highly recommended policy to pursue initially on the way to higher volumes of intra-OIC trade in agricultural products. This initial step could then be followed by additional steps to form a larger, OIC-wide free trade area, by merging all three regional free trade areas into one single FTA.

At first, such a policy proposal could seem problematic due to various existing regional trade arrangements that include OIC member states, individually or in groups. However, multiple memberships to different regional trade agreements already exist in a crisscross fashion, creating the "spaghetti bowl" phenomenon in Bhagwati's words (1995), especially in Africa. The discriminating high tariffs applied by OIC member countries to other OIC members are the result of this phenomenon and prevent the increase of intra-OIC trade. The decision of the African Union members in 2012, to establish a Continental Free Trade Area (CFTA) by 2017, could be given as an example to the type of an FTA to be formed to boost intra-OIC trade in agricultural products.

In line with the constitutive objective of accelerating "the political and socio-economic integration of the continent," the African CFTA aims the elimination of tariffs on intra-African trade in goods by overcoming the challenges posed by the existing trade agreements. The Tripartite Free Trade Area agreement in 2015 was reached on the removal of tariffs and non-tariff measures establishing a path to negotiations on tariff liberalization at a continental level, which will then lead to the convergence of the existing regional economic communities into the CFTA (UNCTAD 2015). One should keep in mind that Article XXIV of GATT opens the way to FTAs or customs unions, on the condition of non-discrimination and in line with the GATT's utmost aim of liberalizing trade at global scale. A closer look on the existing agreements and their exceptions/exclusions/sensitivities shows that they are far from achieving that aim and should not be a barrier to new, larger integration efforts which will require in any case the approval of the related WTO committees (UNCTAD 2016).

The rules of origin which might be seen as an obstacle could be overcome by the four basic principles of the WTO's Rules of Origin Agreement. Those are namely non-discrimination, predictability, transparency and neutrality (Medalla and Lazaro, 2006).

A recent study made for estimating the costs and benefits of tariff reduction of the African Continental Free Trade Area in four different scenarios pointed to significant welfare gains, output and employment expansion, and intra-continental trade growth in the long-run. However, those gains are unequally distributed without the introduction of necessary measures. Some tariff revenue losses result in the short-run, as well as adjustment costs which may not be distributed uniformly across the continent. The study showed also that costs and benefits are reduced if sensitive products are exempt from the tariff reduction (Saygili et al., 2018).

Other than the FTAs described above, the following policy recommendations emerge out of this report's review and analyses:

1. **Reduction of tariff rates:** One policy area is concerned with high tariff protection observed within the OIC for the key product divisions and products that would otherwise be highly effective in boosting intra-OIC agricultural trade. The OIC countries would benefit from tariff reductions, particularly in key product divisions and products identified based on both the growth of the intra-region demand and the existing low intra-regional trade share.

2. **Bilateral arrangements in key products:** It should also be noted that, since the existing set of bilateral agreements covers only a small minority of potential exporter-importer matches in key product divisions, there exists a window of opportunity for the OIC countries that are being matched to establish new trade agreements that cover the products identified in the analysis.

3. **Halal certification:** Since there also exists key product groups that can be critical in promoting intra-OIC agricultural trade but that are not subject to high tariff protection, the set of NTMs especially related with standardization and certification issues should be of prime importance for the policy makers. More specifically, since the key product division that is not subject to high tariff protection is the one that aggregates the meat products, the process of establishing Halal certification across the OIC is a critical NTM-related policy dimension that would be used effectively to promote intra-OIC agricultural trade in meat products. The OIC member countries should accelerate the process of Halal certification by institutionalizing their national accreditation bodies and certification agencies also because certain non-OIC countries may benefit from first-

mover advantage by using their own Halal certifications for products they export to Islamic countries or countries where Islamic minorities live. Last but not least, the Halal certification issue should be viewed by the OIC member countries within a broader perspective of labeling, advertisement and standardization. SMIIC has compiled three sets of guidelines that establish the OIC standards for Halal product producers, agencies that grant Halal certifications, and accreditation bodies that accreditate certification agencies, respectively. The OIC member countries should envision that these existing sets of guidelines would serve as a foundation to establish a unique Halal certification to be approved and implemented by all OIC member countries that also signify health, safety, and environmental protection standards as in the case the CE marking of the European Economic Area.

4. **The Trade Preferential System within the OIC:** The large number of existing bilateral and multilateral trade agreements of the OIC member countries with non-OIC countries stands out as a source of concern since such trade agreements pose the risk of limiting the scope of trade policy coherence within the OIC. Accelerating the implementation of the Trade Preferential System among the OIC Member States (TPS-OIC) is thus an important element that would be on the policy agenda. Besides, a potential customs union within the TPS-OIC should be defended as the logical next step after the TPS-OIC by the member country governments.

5. **Promotion of niche products:** The OIC member countries face competition from each other in certain agricultural products and in certain markets around the globe as their geography, climate conditions and factor endowments exhibit some degree of similarity. This makes the promotion of intra-OIC agricultural trade a particularly challenging objective, and policies that aim further trade facilitation within the OIC should be designed and implemented. These policies range from product diversification and trademarking to marketing strategies and advertising campaigns. More specifically, the OIC countries should promote the niche agricultural products of their fellow OIC countries under a reciprocal understanding of benefits.

6. **Commercial cooperation:** The OIC member countries differ in relative abundance of land and natural resources and of financial funds and credit. This type of diversity is a source of complementarity and opens a window of opportunity in commercial cooperation. There already exist some joint ventures among the OIC countries where businesses from one OIC member country invest in another OIC member country by purchasing unused land and initiate agricultural production and export. Policies should be designed and implemented to incentivize commercial cooperation among the OIC member countries in the field of agricultural investment as it directly increases trade among at least two OIC member countries. Removal or reductions in the cost of obtaining business visas all across the OIC member countries, for instance, is a concrete policy action that would contribute to commercial cooperation.

7. **Non-commercial cooperation:** Non-commercial cooperation among the OIC member countries in terms of technical expertise, skills, and safety standards stands out as an important action that would facilitate intra-OIC trade in agricultural products. Naturally, the OIC member countries have a diverse set of safety standards, market information systems, market institutions and human capital stocks. For this reason, the OIC member

countries should pay particular attention to policies that would support the effective sharing of best-practice cases in agriculture and agricultural trade.

8. **Statistical capacity with regard to agricultural trade flows and policy measures:** SESRIC has two specialized divisions working on agriculture and trade statistics, and ICDT has web portals such as the OIC Trade Map. However, new projects should be designed and conducted (i) to thoroughly identify the data availability and reliability problems in agricultural trade policy measures all across the OIC and (ii) to develop institutional reform agendas that would help the OIC member countries alleviate the existing capability problems in the near future. A more specific policy action may be establishing a new division on agricultural trade policy measures within SESRIC and benefiting from this organ's established capacities in data collecting and dissemination.

9. **Directed research in agricultural trade policy analysis:** The existing research outputs obtained through the commissioned studies by the trade and agriculture working groups of COMCEC are highly illuminating for a large set of structural problems faced by the OIC member countries. But these two working groups should work together with an understanding that evaluates trade as a whole and treat agricultural trade as a subset of overall trade. One research question that should be targeted with this broad view is concerned with the tariff equivalents of NTMs. A well-structured project should aim at calculating these tariff equivalents for a sufficiently large set of products and countries. The methodologies explained and exemplified in WTO's (2012) *A Practical Guide to Trade Policy Analysis* may be used to structure such a research project. Another way to go forward is to develop and analyze general equilibrium models of trade policies and trade integration both within the OIC and between the OIC and non-OIC countries.

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Annexes

Annex A: Country Groups

Table A.1: OIC member countries by regional groups

African Group	Asian Group	Arab Group
Benin	Afghanistan	Algeria
Burkina Faso	Albania*	Bahrain
Cameroon	Azerbaijan	Comoros
Chad	Bangladesh	Djibouti
Côte d'Ivoire	Brunei Darussalam	Egypt
Gabon	Guyana*	Iraq
Gambia	Indonesia	Jordan
Guinea	Iran	Kuwait
Guinea-Bissau	Kazakhstan	Lebanon
Mali	Kyrgyzstan	Libya
Mozambique	Malaysia	Mauritania
Niger	Maldives	Morocco
Nigeria	Pakistan	Oman
Senegal	Suriname*	Palestine
Sierra Leone	Tajikistan	Qatar
Togo	Turkey	Saudi Arabia
Uganda	Turkmenistan	Somalia
	Uzbekistan	Sudan
		Syria
		Tunisia
		UAE
		Yemen

Source: OIC[15]

*Note: * Guyana and Suriname are located in Latin America Region; Albania is in European Region. Due to the limited number of countries in that region, they are included in the Asian Group.*

[15] OIC. (2018). Member States. Retrieved from https://www.oic-oci.org/states/?lan=en

Table A.2: Some trade blocs across the world

NAFTA	MERCOSUR	ASEAN	EU-28
Canada	Argentina	Brunei Darussalam	Austria
Mexico	Brazil	Cambodia	Belgium-Luxembourg
USA	Paraguay	Indonesia	Bulgaria
	Uruguay	Laos	Croatia
	Venezuela**	Malaysia	Cyprus
		Myanmar	Czech Republic
		Philippines	Denmark
		Singapore	Estonia
		Thailand	Finland
		Viet Nam	France
			Germany
			Greece
			Hungary
			Ireland
			Italy
			Latvia
			Lithuania
			Malta
			Netherlands
			Poland
			Portugal
			Romania
			Slovakia
			Slovenia
			Spain
			Sweden
			UK

Source: EU, Brazil Ministry of Foreign Affairs, and USTR[16]
*Note: ** MERCOSUR, suspended Venezuela's membership indefinitely.*

[16]Brazil Ministry of Foreign Affairs. (2018). MERCOSUR. Retrieved from http://www.itamaraty.gov.br/en/politica-externa/integracao-regional/6347-mercosur-en
EU. (2018). About the EU: The 28 Member Countries of the EU. Retrieved from https://europa.eu/european-union/about-eu/countries_en
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Annex B: Product Classification and Conversion

Table B.1: Product classification

SITC Rev. 4 (Standard International Trade Classification, Rev.4)

Title	Section	Division
Agricultural Products – SITC Sections [0]+[1]+[2]+[4] – Divisions [27, 28]		
Agri-food Products - SITC Sections [0] + [1] + [4] Divisions +[22] – [03]		
	0 - Food and live animals	
		00 - Live animals other than animals of division 03
		01 - Meat and meat preparations
		02 - Dairy products and birds' eggs
		04 - Cereals and cereal preparations
		05 - Vegetables and fruit
		06 - Sugars, sugar preparations and honey
		07 - Coffee, tea, cocoa, spices, and manufactures thereof
		08 - Feeding stuff for animals (not including unmilled cereals)
		09 - Miscellaneous edible products and preparations
	1 - Beverages and tobacco	
		11 12 - Beverages and tobacco
	4 - Animal and vegetable oils, fats and waxes	
		41 42 43 - Animal and vegetable oils, fats and waxes
	22 - Oil-seeds and oleaginous fruits	
		22 - Oil-seeds and oleaginous fruits
Fish Products – SITC Sections [03]		
	03 - Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof	
		03 - Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations there
Agricultural Raw Materials – SITC Sections [2] - Divisions [22, 27, 28]		
	2 - Crude materials, inedible, except fuels	
		2 - Crude materials, inedible, except fuels
		21 - Hides, skins and furskins, raw
		23 - Crude rubber (including synthetic and reclaimed)
		24 - Cork and wood
		261 - Silk
		263 - Cotton
		264 - Jute and other textile bast fibres, n.e.s., raw or processed but not spun; tow and waste of these fibres (including yarn waste and garnetted stock)
		268 - Wool and other animal hair (including wool tops)

Source: COMCEC. (2018). Analysis of Agri-Food Trade Structures to Promote Agri-Food Trade Networks in the Islamic Countries. tanding Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation. September 2018.

Notes on conversion and data sources

Findings based on trade flows and trade policy data, are presented in SITC Rev. 4 with the customized main groupings for the agricultural products. In the case of original data is shared with another product classification (i.e. HS 1992 , HS 1996, HS 2002, HS 2012, HS2017), raw data are related to SITC Rev. 4 classification with related concordance tables. There is not any direct concordance tables from HS 92 to SITC Rev. 4 and from HS 96 to SITC Rev.4. Hence, these products first related to HS 07 and then from HS 07 to SITC Rev.4 are related. More information can be found in the following online resources.

UN Statistic Division. (2008). Correspondence Table between SITC, Rev. 4 and HS07 (S4HS07). Retrieved from https://unstats.un.org/unsd/trade/sitcrev4.htm

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Annex C: Key Informant Interview

Questions

1. What are the most common forms of agricultural trade policies (such as import tariffs and quotas, export subsidies or taxes, import or export bans, trade facilitation and other non-tariff measures such as health and safety procedures) in your country? What are the primary purposes of pursuing these agricultural trade policies? Which institutions are most significant in the design and implementation of such policies?

2. What types of policies exist in terms of improving agricultural product supply chains in your country? What is the primary purpose of implementing such policies? Which institutions are most significant in the design and implementing such policies?

3. What is the significance of agricultural trade (exports and imports) on your country's overall agricultural growth and development and food security? What are the major constraints that limit the role of agricultural trade on overall development? What policy measures exist in order to increase the role of agricultural trade on overall economic growth and development in your country?

4. Please give the names of three countries which you think have the highest importance for your country's agricultural exports and imports? (your current close trade partners).

5. In your opinion, which countries will be your country's trade partners for agricultural products over the next five years? In your opinion what is the significance of OIC countries in your country's overall agricultural trade? Do you think that the share of OIC countries in your country's agricultural trade (exports and imports) will increase? Which OIC countries are most significant for your country's agricultural trade (current and over the five years).

6. In your opinion, what are the opportunities of establishing close agricultural trade ties with OIC countries? Threats?

7. Do you think a regional trade agreement across OIC countries be an opportunity or a threat for your country's exports?

8. In your opinion, what can be done in order to facilitate an inclusive and sustainable agricultural trade among the OIC member countries?

9. Can you also comment on agricultural trade policies through which the performance of agricultural markets can be improved particularly towards benefits to smallholder farmers of the OIC countries?

Annex D: Lists of Key Informants

Gambia

Informant	*Affiliation*
Ousman Bojang	Min. of Trade, Industry, Regional Integration & Employment
Dr. Bomba A.M. Banja	Min. of Fisheries, Water Res. & National Assembly Matters
Olimatou Sadia Deen-Sarr	Gambia Chamber of Commerce and Industry (GCCI)
Hassan Jallow	Ministry of Agriculture
Adda Gaye	Ministry of Agriculture
Momoudou A. Ceesay	Gambia Horticultural Enterprises (GHE)
Sulayman Mboge	Radville Farms

Morocco

Informant	*Affiliation*
Fatima Zahra El Miri	Min. of Agr., Fisheries, Rural Dev., Water and Forests
Jaouad Idrissi	Min. of Agr., Fisheries, Rural Dev., Water and Forests
Imaue Regragui	Min. of Agr., Fisheries, Rural Dev., Water and Forests
Asmoa Chabogui	Min. of Agr., Fisheries, Rural Dev., Water and Forests
Moulay Ismail Taqui	Min. of Industry, Investment, Trade and Digital Economy
Youssef Benabdouh	Min. of Industry, Investment, Trade and Digital Economy
Rachid Doukkali	OCP Policy Center
Najib Akesbi	Hassan II Institute of Agronomy & Veterinary Medicine
Fatima Zahra Zerouali	Chamber of Agriculture in Casablanca-Settat
Khalil El Hasnaoui	Chamber of Agriculture in Casablanca-Settat
El Hassane Hzaine	Islamic Centre for Development and Trade
Maumodou Bocar Sall	Islamic Centre for Development and Trade

Turkey

Informant	*Affiliation*
Adil Altan	Ministry of Agriculture and Forestry
Hakan Arslan	Ministry of Agriculture and Forestry
Melik Aytaç	Ministry of Agriculture and Forestry
Erhan Ekmen	Ministry of Agriculture and Forestry
Fersin Keskin	Ministry of Agriculture and Forestry
İlker Salar	Ministry of Agriculture and Forestry
Aylin Bebekoğlu	Ministry of Trade
Seda Sevgi	Ministry of Trade
Belkıs Gürsel	Ministry of Trade
Volkan Demirel	Ministry of Trade
Mert Can Duman	Ministry of Trade
S. Boğaç Kanadlı	Ministry of Trade
İlay Aykanat	Ministry of Trade
Kenan Bağcı	OIC SESRIC
Burhanettin Topsakal	Tareks Co. Ltd.
Özgür Güven	Agricultural Credit Cooperatives of Turkey
Bader Arslan	Turkish Exporters' Assembly
Taylan Çoban	Halal Accreditation Agency

Annex E: Additional Material for Chapter 2

Please see the supplementary materials located online at **http://ebook.comcec.org/**

Annex F: Additional Material for Chapter 3

Please see the supplementary materials located online at **http://ebook.comcec.org/**

Annex G: Intra-OIC Agricultural Trade Policies Survey

Survey Questions

1. Which OIC country do you currently work?
2. Which of the following best describes your affiliation?
    a. Ministry
    b. Government agency
    c. Chambers
    d. Farmers' associations / cooperatives
    e. International organization / NGO
    f. Commodity board
    g. State-owned enterprise
    h. Other
3. In your opinion, what is the importance of agricultural trade (exports and imports) on the country's overall agricultural growth and development?

Very important	Important	Fairly important	Slightly important	Not important

4. In your opinion, what is the importance of agricultural trade (exports and imports) on the country's current state of food security?

Very important	Important	Fairly important	Slightly important	Not important

5. What are the most important three reasons that refrain agricultural trade to contribute to overall agricultural growth and development and level of food security? (please tick three of the reasons from the list below)
    a. The country does not have diversified export markets
    b. The country does not have diversified import markets
    c. The country does not have diversified export products
    d. The country does not have diversified import products
    e. Price received by the farmers is low (high marketing margins due to middlemen)
    f. Customs, procedures and requirements are high
    g. Taxes, charges and levies are high
    h. There are stringent standards, sanitary measures, prohibitions, restrictions, licensing in export markets
    i. Other

6. Please indicate the status of the following factors with regards to imports and exports of agricultural products in your country.

	Very poor	Below avg.	Avg.	Above avg.	Excellent
Marketing knowledge and information					
Human resources					
Financial resources					
Quality of the products					
Standardization of the products					
Technical adaptability of the producers					

7. Are there commodity boards in your country?

No	Yes (Please specify:)

8. Do you think commodity boards continue to be (or will be) important for facilitating the external trade of agricultural products?

No answer / Not applicable / No opinion	Yes	No

9. Are there state-owned enterprises in your country?

No	Yes (Please specify:)

10. Do you think state owned enterprises continue to be (or will be) important for facilitating the external trade of agricultural products?

No answer / Not applicable / No opinion	Yes	No

11. Are there cooperatives with focus on agricultural sales / marketing / exports / imports in your country?

No	Yes (Please specify:)

12. Do you think cooperatives continue to be (or will be) important for facilitating the external trade of agricultural products?

No answer / Not applicable / No opinion	Yes	No

13. In your opinion, should the country continue close economic and agricultural trade relationship with its current trade partners?

Yes	No

14. Please give the names of three countries which you think have the highest importance for your country's agricultural exports and imports? (your current close trade partners)

15. Please give the names of three countries which you think will be important for your country's agricultural exports and imports in the near future (1-5 years)? (your future close trade partners)

16. In your opinion, how can your country further facilitate trade with current trade partners? (Your input is very valuable to us, but you can skip this question if you like.)

17. Over the next five years which of the following regions do you think will be your country's trade partners for agricultural products?

a. North America
b. Latin America
c. Western Europe
d. Central and Eastern Europe, the Baltic States, and the CIS (transition economies)
e. Africa
f. Middle East
g. Asia

18. Do you think establishing and improving bilateral trade relationship with OIC member states be beneficial in improving your country's export performance in agricultural products?

Yes	No

19. Which of the following OIC countries do you think will your country establish bilateral agricultural trade agreement?

20. Please state the stakeholders (and their countries) that you regularly contact / exchange information / exchange knowledge on agricultural exports / imports / prices and / or issues related to agricultural trade and policies (Please also state the frequency of contact: -At least once a week -At least once a month -Once a year or less frequent)

Responses, Response Rates and Response Counts

1. Which OIC country do you currently work?

Africa group	Arab group	Asian group
Cote d'Ivoire (1) The Gambia (1) Uganda (1)	Algeria (1) Egypt (5) Jordan (3) Lebanon (4) Morocco (2) Palestine (4) Qatar (2) Sudan (1) Tunisia (4) UAE (1)	Afghanistan (1) Brunei-Darussalam (2) Indonesia (2) Iran (2) Malaysia (2) Pakistan (2) Suriname (1) Turkey (4)

2. Which of the following best describes your affiliation?

Response	Response Rate	Response Count
Ministry	41.30%	19
Government agency	13.04%	6
Chambers	0.00%	0
Farmers' associations / Cooperatives	0.00%	0
International organization / NGO	8.70%	4
Commodity Board	0.00%	0
State-owned enterprises	2.17%	1
Other: Please state	34.78%	16
Academic (13), Other (3)		

3. In your opinion, what is the importance of agricultural trade (exports and imports) on the country's overall agricultural growth and development?

Response	Very important	Important	Fairly important	Slightly important	Not important
Response Rate	67.39%	21.74%	4.35%	4.35%	2.17%
Response Count	31	10	2	2	1

4. In your opinion, what is the importance of agricultural trade (exports and imports) on the country's current state of food security?

Response	Very important	Important	Fairly important	Slightly important	Not important
Response Rate	71.74%	21.74%	2.17%	4.35%	0.00%
Response Count	33	10	1	2	0

5. What are the most important three reasons that refrain agricultural trade to contribute to overall agricultural growth and development and level of food security? (please tick three of the reasons from the list below)

Response	Response Rate	Response Count
The country does not have diversified export markets.	41.30%	19
The country does not have diversified import markets.	10.87%	5
The country does not have diversified export products.	28.26%	13
The country does not have diversified import products.	4.35%	2
Price received by the farmers is low (high marketing margins due to middlemen).	73.91%	34
Customs, procedures and requirements are high.	50.00%	23
Taxes, charges and levies are high.	21.74%	10
There are stringent standards, sanitary measures, prohibitions, restrictions, licensing in export markets.	60.87%	28
Other: Please specify	8.70%	4
1: bureaucratic hurdles, 2: (no answer), 3: absence of global agricultural policy, 4: transport and trade facilitation procedures		

6. Please indicate the status of the following factors with regards to imports and exports of agricultural products in your country.

Response		Very poor	Below avg.	Avg.	Above avg.	Excellent
Marketing knowledge and information	Rate	13.04%	21.74%	52.17%	13.04%	0.00%
	Count	6	10	24	6	0
Human resources	Rate	2.17%	21.74%	41.30%	28.26%	6.52%
	Count	1	10	19	13	3
Financial resources	Rate	10.87%	30.43%	41.30%	17.39%	0.00%
	Count	5	14	19	8	0
Quality of the products	Rate	0.00%	13.04%	47.83%	32.61%	6.52%
	Count	0	6	22	15	3
Standardization of the products	Rate	4.35%	32.61%	39.13%	19.57%	4.35%
	Count	2	15	18	9	2
Technical adaptability of the producers	Rate	10.87%	15.22%	52.17%	17.39%	4.35%
	Count	5	7	24	8	2

7. Are there commodity boards in your country?

Response	No	Yes
Response Rate	43.48%	56.52%
Response Count	20	26

8. Do you think commodity boards continue to be (or will be) important for facilitating the external trade of agricultural products?

Response	No answer / Not applicable / No opinion	Yes	No
Response Rate	17.39%	73.91%	8.70%
Response Count	8	34	4

9. Are there state-owned enterprises in your country?

Response	No	Yes
Response Rate	39.13%	60.87%
Response Count	18	28

10. Do you think state owned enterprises continue to be (or will be) important for facilitating the external trade of agricultural products?

Response	No answer / Not applicable / No opinion	Yes	No
Response Rate	17.39%	58.70%	23.91%
Response Count	8	27	11

11. Are there cooperatives with focus on agricultural sales / marketing / exports / imports in your country?

Response	No	Yes
Response Rate	26.09%	73.91%
Response Count	12	34

12. Do you think cooperatives continue to be (or will be) important for facilitating the external trade of agricultural products?

Response	No answer / Not applicable / No opinion	Yes	No
Response Rate	8.70%	84.78%	6.52%
Response Count	4	39	3

13. In your opinion, should the country continue close economic and agricultural trade relationship with its current trade partners?

Response	Yes	No
Response Rate	78.26%	21.74%
Response Count	36	10

14. Please give the names of three countries which you think have the highest importance for your country's agricultural exports and imports? (your current close trade partners)

Response	Rate	Count	Response	Rate	Count
Saudi Arabia	9.15%	13	Africa	0.70%	1
Russia	7.75%	11	Australia	0.70%	1
Germany	7.04%	10	Azerbaijan	0.70%	1
Turkey	5.63%	8	Brunei-Darussalam	0.70%	1
EU	4.23%	6	Burkina Faso	0.70%	1
France	4.23%	6	Canada	0.70%	1
Iraq	4.23%	6	Ghana	0.70%	1
Jordan	4.23%	6	Indonesia	0.70%	1
China	3.52%	5	Japan	0.70%	1
Italy	3.52%	5	Kenya	0.70%	1
Syria	3.52%	5	Kuwait	0.70%	1
Egypt	2.82%	4	Lebanon	0.70%	1
India	2.82%	4	Libya	0.70%	1
Iran	2.82%	4	Mali	0.70%	1
UAE	2.82%	4	North Africa	0.70%	1
Middle East	2.11%	3	Oman	0.70%	1
Netherlands	2.11%	3	Singapore	0.70%	1
Spain	2.11%	3	Sudan	0.70%	1
USA	2.11%	3	Thailand	0.70%	1
ASEAN	1.41%	2	Tunisia	0.70%	1
Brazil	1.41%	2	Ukraine	0.70%	1
Morocco	1.41%	2	Uzbekistan	0.70%	1
Pakistan	1.41%	2	Vietnam	0.70%	1
UK	1.41%	2			
Total No. of Entries		**119**			

15. Please give the names of three countries which you think will be important for your country's agricultural exports and imports in the near future (1-5 years)? (your future close trade partners)

Response	Rate	Count	Response	Rate	Count
Russia	10.37%	14	Ukraine	1.48%	2
Turkey	8.89%	12	UAE	1.48%	2
China	6.67%	9	ASEAN	0.74%	1
Saudi Arabia	6.67%	9	Balkan countries	0.74%	1
Germany	4.44%	6	Brazil	0.74%	1
Iran	4.44%	6	Burkina Faso	0.74%	1
Middle East	4.44%	6	Canada	0.74%	1
Syria	4.44%	6	Cote d'Ivoire	0.74%	1
Iraq	3.70%	5	Eastern Europe	0.74%	1
Egypt	2.96%	4	Indonesia	0.74%	1
EU	2.96%	4	Italy	0.74%	1
France	2.96%	4	Lebanon	0.74%	1
Jordan	2.96%	4	Mali	0.74%	1
Morocco	2.22%	3	Niger	0.74%	1
Qatar	2.22%	3	North Africa	0.74%	1
Africa	1.48%	2	Oman	0.74%	1
Australia	1.48%	2	Pakistan	0.74%	1
India	1.48%	2	Singapore	0.74%	1
Katar	1.48%	2	Tunisia	0.74%	1
Libya	1.48%	2	Turkmenistan	0.74%	1
Senegal	1.48%	2	USA	0.74%	1
Spain	1.48%	2	Uzbekistan	0.74%	1
Sudan	1.48%	2			
Total No. of Entries		**135**			

16. In your opinion, how can your country further facilitate trade with current trade partners? (Your input is very valuable to us, but you can skip this question if you like.)

Response	Answered	Skipped
Response Rate	71.74%	28.26%
Response Count	33	13

17. Over the next five years which of the following regions do you think will be your country's trade partners for agricultural products?

Response	Response Rate	Response Count
North America	4.35%	2
Latin America	8.70%	4
Western Europe	41.30%	19
Central and Eastern Europe, the Baltic States and the CIS (transition economies)	34.78%	16
Africa	45.65%	21
Middle East	73.91%	34
Asia	47.83%	22

18. Do you think establishing and improving bilateral trade relationship with OIC member states be beneficial in improving your country's export performance in agricultural products?

Response	Yes	No
Response Rate	97.83%	2.17%
Response Count	45	1

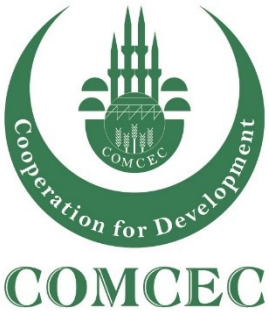
19. Which of the following OIC countries do you think will your country establish bilateral agricultural trade agreement?

Response	Rate	Count	Response	Rate	Count
Saudi Arabia	50.00%	23	Mali	13.04%	6
Turkey	47.83%	22	Nigeria	13.04%	6
Qatar	45.65%	21	Somalia	13.04%	6
Kuwait	41.30%	19	Tunisia	13.04%	6
Iran	36.96%	17	Yemen	13.04%	6
Iraq	36.96%	17	Benin	10.87%	5
UAE	36.96%	17	Chad	10.87%	5
Indonesia	34.78%	16	Comoros	10.87%	5
Egypt	32.61%	15	Djibouti	10.87%	5
Jordan	30.43%	14	Gabon	10.87%	5
Morocco	28.26%	13	The Gambia	10.87%	5
Sudan	26.09%	12	Mauritania	10.87%	5
Bahrain	23.91%	11	Uganda	10.87%	5
Lebanon	23.91%	11	Bangladesh	8.70%	4
Oman	23.91%	11	Guinea-Bissau	8.70%	4
Kazakhstan	21.74%	10	Sierra Leone	8.70%	4
Azarbaijan	19.57%	9	Togo	8.70%	4
Cote d'Ivoire	19.57%	9	Mozambique	6.52%	3
Malaysia	19.57%	9	Afghanistan	4.35%	2
Pakistan	19.57%	9	Kyrgyz Republic	4.35%	2
Senegal	19.57%	9	Tajikistan	4.35%	2
Cameroon	17.39%	8	Turkmenistan	4.35%	2
Palestine	17.39%	8	Albania	2.17%	1
Uzbekistan	17.39%	8	Brunei-Darussalam	2.17%	1
Algeria	15.22%	7	Guyana	2.17%	1
Libya	15.22%	7	Maldives	2.17%	1
Niger	15.22%	7	Suriname	0.00%	0
Syria	15.22%	7			
Burkina Faso	13.04%	6			
Guinea	13.04%	6			

20. Please state the stakeholders (and their countries) that you regularly contact / exchange information / exchange knowledge on agricultural exports / imports / prices and / or issues related to agricultural trade and policies (Please also state the frequency of contact: -At least once a week -At least once a month -Once a year or less frequent)

Response	Rate	Count
Providing 1 response	54.35%	25
Providing 2 responses	4.35%	2
Providing 3 responses	41.30%	19

Index



Reviewing Agricultural Trade Policies To Promote Intra-OIC Agricultural Trade

Supplementary Materials

(Annex E & Annex F)

COMCEC Coordination Office

February 2019

Annex E: Additional Material for Chapter 2

Table E. 1 Evolution of the global total export value of the top 5 agricultural export products according to destinations (%)

	NAFTA	MERCOSUR	ASEAN	EU-28	Others	Total
2008	17.0	6.5	6.2	42.6	27.6	100
2009	15.6	5.8	6.7	41.9	30.0	100
2010	15.9	6.2	7.0	40.5	30.4	100
2011	16.1	6.5	7.0	39.6	30.8	100
2012	15.6	7.0	6.9	38.6	32.0	100
2013	15.4	6.6	6.6	39.6	31.9	100
2014	16.1	5.7	7.0	38.7	32.5	100
2015	16.6	5.7	7.2	37.1	33.3	100
2016	16.2	5.7	7.1	37.5	33.5	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table E. 2 Evolution of the global total import value of the top 5 agricultural import products according to country group of origin (%)

	NAFTA	MERCOSUR	ASEAN	EU-28	Others	Total
2008	14.0	1.8	3.6	44.4	36.2	100
2009	14.2	1.6	4.1	43.4	36.7	100
2010	14.4	1.7	4.8	41.0	38.2	100
2011	13.6	1.7	5.2	39.4	40.1	100
2012	14.2	1.8	5.5	37.6	41.0	100
2013	14.0	1.9	5.4	38.3	40.5	100
2014	14.6	1.7	5.8	37.9	40.0	100
2015	16.2	1.4	6.3	36.5	39.7	100
2016	16.2	1.3	7.1	36.9	38.4	100

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Annex F: Additional Material for Chapter 3

Table F. 1 Global agricultural exports and OIC countries (value)

	World agricultural exports, billion USD	Agricultural exports of OIC countries, billion USD	Agricultural exports of non-OIC countries, billion USD	% share of OIC in total world exports
2008	1,223.6	103.8	1,119.7	8.5
2009	1,088.5	99.4	989.2	9.1
2010	1,252.6	129.5	1,123.2	10.3
2011	1,550.4	168.5	1,382.0	10.9
2012	1,515.6	156.2	1,359.4	10.3
2013	1,590.6	155.6	1,435.0	9.8
2014	1,614.1	151.9	1,462.2	9.4
2015	1,452.9	140.8	1,312.1	9.7
2016	1,473.6	143.8	1,329.8	9.8
Average	1,418.0	138.8	1,279.2	9.8

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 2 Global agricultural imports and OIC countries (value)

	World agricultural imports, billion USD	Agricultural imports of OIC countries, billion USD	Agricultural imports of non-OIC countries, billion USD	% share of OIC total world imports
2008	1,223.6	145.5	1,078.1	11.9
2009	1,088.5	140.6	948.0	12.9
2010	1,252.6	173.4	1,079.2	13.8
2011	1,550.4	238.0	1,312.5	15.3
2012	1,515.6	221.6	1,294.0	14.6
2013	1,590.6	234.6	1,356.1	14.7
2014	1,614.1	235.1	1,379.0	14.6
2015	1,452.9	208.7	1,244.2	14.4
2016	1,473.6	204.0	1,269.6	13.8
Average	1,418.0	200.2	1,217.9	14.0

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 3 Top export products according to the 2014-2016 average % share (% in the country group; % in OIC and global trade value)

African Group	% in African group's agricultural exports	% in OIC agricultural exports	Global trade value (billion USD)
07	40.5	11.2	103.0
05	13.7	17.4	233.4
24	10.1	3.8	66.6
263	7.8	2.0	13.1
03	5.4	8.3	129.8
Asian group	**% in Asian group's agricultural exports**	**% in OIC agricultural exports**	**Global trade value (billion USD)**
41-42-43	34.0	24.2	84.9
05	14.0	17.4	233.5
04	8.7	7.4	165.8
03	7.9	8.3	129.8
07	7.2	11.3	103.0
Arab group	**% in Arab group's agricultural exports**	**% in OIC agricultural exports**	**Global trade value (billion USD)**
05	31.1	17.4	233.4
03	11.7	8.3	129.8
02	9.4	2.9	83.5
41-42-43	7.4	24.2	84.9
04	6.9	7.4	165.8

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Shaded cells denote that the % share in region's agricultural exports is larger than the % share in OIC agricultural exports.

Table F. 4 Top import products according to the 2014-2016 average % share (% in the country group; % in OIC and global trade value)

African Group	% in African group's agricultural imports	% in OIC agricultural imports	Global trade value (billion USD)
04	33.7	22.6	165.8
09	10.0	5.8	79.3
41-42-43	9.7	7.7	84.9
03	9.5	3.3	129.8
06	8.0	5.9	47.8
Asian group	**% in Asian group's agricultural imports**	**% in OIC agricultural imports**	**Global trade value (billion USD)**
04	17.4	22.6	165.8
05	10.8	11.5	233.4
41-42-43	9.7	7.7	84.9
08	8.0	5.3	77.3
07	6.7	5.8	103.0
Arab group	**% in Asian group's agricultural imports**	**% in OIC agricultural imports**	**Global trade value (billion USD)**
04	24.6	22.6	165.8
05	13.0	11.5	233.4
02	8.8	6.8	83.5
01	8.3	6.0	135.0
11-12	6.8	6.4	139.9

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations
Note: Shaded cells denote that the % share in region's agricultural exports is larger than the % share in OIC agricultural exports.

Table F. 5 % Distribution of the total export value of the top 5 export products of the African Group according to destinations, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	2.3	3.9	3.3	90.5	100
2009	1.6	3.4	2.5	92.5	100
2010	1.9	5.8	2.3	90.1	100
2011	2.2	6.7	2.1	89.0	100
2012	1.9	5.7	2.7	89.7	100
2013	2.5	7.3	3.2	87.0	100
2014	2.0	8.3	2.9	86.8	100
2015	2.0	6.4	2.7	88.8	100
2016	3.0	6.3	2.9	87.8	100
Average	2.2	6.0	2.7	89.1	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics.

Table F. 6 % Distribution of the total import value of the top 5 import products of the African Group according to country of origin, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	4.1	5.7	2.8	87.4	100
2009	4.0	11.1	4.8	80.1	100
2010	3.8	16.2	5.1	74.8	100
2011	3.5	13.0	2.8	80.8	100
2012	4.9	13.1	3.3	78.8	100
2013	5.2	15.2	3.4	76.1	100
2014	5.1	17.0	4.1	73.8	100
2015	6.0	12.3	6.2	75.5	100
2016	5.8	15.3	4.4	74.5	100
Average	4.7	13.2	4.1	78.0	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 7 % Distribution of the total export value of the top 5 export products of the Asian Group according to destinations, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	1.0	9.7	11.7	77.6	100
2009	2.3	14.2	10.3	73.1	100
2010	2.7	15.9	10.7	70.7	100
2011	2.8	17.1	12.9	67.2	100
2012	2.4	16.1	11.2	70.3	100
2013	3.0	14.6	11.8	70.6	100
2014	3.3	14.0	11.6	71.1	100
2015	2.1	13.6	11.0	73.3	100
2016	2.6	13.3	11.8	72.4	100
Average	2.5	14.3	11.4	71.8	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 8 % Distribution of the total import value of the top 5 import products of the Asian Group according to country of origin, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.7	17.1	4.0	78.2	100
2009	1.0	24.5	1.0	73.5	100
2010	1.0	28.8	1.0	69.2	100
2011	1.1	26.8	5.7	66.4	100
2012	1.5	26.0	0.7	71.8	100
2013	1.3	21.7	0.7	76.3	100
2014	1.7	21.3	0.8	76.2	100
2015	1.4	20.9	0.9	76.7	100
2016	1.6	20.9	3.6	73.9	100
Average	1.3	23.1	2.0	73.6	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 9 % Distribution of the total export value of the top 5 export products of the Arab Group according to destinations, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	1.6	6.1	39.5	52.8	100
2009	2.5	1.8	44.5	51.2	100
2010	3.3	1.9	41.1	53.7	100
2011	2.8	13.1	32.5	51.6	100
2012	2.8	1.8	39.6	55.8	100
2013	2.4	1.7	46.2	49.7	100
2014	3.7	2.2	46.7	47.4	100
2015	3.3	1.8	49.6	45.3	100
2016	2.5	6.2	47.3	44.0	100
Average	2.8	4.1	43.0	50.2	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 10 % Distribution of the total import value of the top 5 import products of the Arab Group according to country of origin, top 5 in 3-year average between 2014 and 2016

	African group	Asian group	Arab group	Non-OIC Countries	Total
2008	0.1	6.7	12.9	80.3	100
2009	0.2	7.2	13.6	79.0	100
2010	0.1	8.0	11.8	80.1	100
2011	0.1	10.2	8.1	81.5	100
2012	0.2	8.0	9.7	82.1	100
2013	0.2	8.0	12.8	79.0	100
2014	0.1	8.0	11.3	80.6	100
2015	0.1	8.1	15.4	76.4	100
2016	0.1	9.2	16.9	73.7	100
Average	0.1	8.2	12.5	79.2	

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics

Table F. 11 Within block tariff rates selected divisions, applied tariff rates, ad valorem equivalent, %, 2016

Product Division	MERCOSUR	EU-28	NAFTA	ASEAN	OIC	Average
Live animals	0	0	1.47	1.98	0.22	0.73
Meat	1.44	0	9.56	1.87	1.70	2.91
Sugars	14.10	0	1.94	8.03	10.99	7.01
Feeding stuff for animals	0.89	0	1.21	0.33	2.33	0.95
Oil seeds	0	0	0	0.25	6.14	1.28

Source: CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table F.12: Top export products and tariffs implemented by the OIC members

Note: This table collects information on the global and OIC market shares of countries' top export products at the product level and weighted average tariff rates these products face at the OIC markets. Each column is colored according to the thresholds indicated at the first row. To take just one example, Grapes (fresh) from Afghanistan has a large share within Afghanistan's agricultural exports (larger than 10%) as indicated in the colored third column. This product is important, and hence the fourth column is colored, also because 0.9% of Afghan share in Grapes (fresh) is larger than the overall Afghan share in agricultural products. Furthermore, the share 98.7% of OIC markets for Afghan Grapes (fresh) is larger than the overall OIC share of agricultural products from Afghanistan, and the fifth column is also colored. Finally, the last column is colored for Grapes (fresh) because the weighted average applied tariff rates faced by this product by Afghan exporters in OIC markets is larger than the corresponding rates applied to overall agricultural exports from Afghanistan in OIC markets.

	Thresholds for coloring	**10.0**	**Country's share in the world agricultural exports, %**	**Share of OIC as destination for the country's agr. exports, %**	**Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %**
Exporter	**Product**	**Share of the product in the exporter's total agr. exports, %**	**Share of the country in the total world export of the product, %**	**Share of OIC as destination for the country's export of the product, %**	**Weighted average tariff rates implemented by OIC members to the country's export of the product, %**
Afghanistan	Grapes, fresh	14.4	0.9	98.7	20.0
	Grapes, dried	13.7	4.1	9.2	2.5
	Figs, fresh/dried	12.3	11.9	1.1	2.5
	Cotton (other than linters), not carded/combed	11.5	0.5	99.6	3.0
	Apples, fresh	5.6	0.4	91.3	20.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
Albania	Other fish, prepared/preserved, whole/in pieces, but not minced	13.1	0.9	0.2	58.6
	Chestnuts, fresh/dried, whether/not shelled/peeled	4.9	2.6	0.2	5.0
	Bread & bread products, n.e.s.	3.6	0.0	1.9	12.4
	Whole bovine (incl. buffalo)/equine hides & skins, of a weight per skin not >8kg (simply dried)/10kg (dry-salted)/16kg (fresh/wet-salted/otherwise preserved)	2.3	0.8	0.1	5.0
	Spices (excl. pepper/pimento/headings075.21 - 075.28); mixtures of two/more of the products of different headings of group 075	1.3	0.2	49.4	29.9
Algeria	Other beet/cane sugar in solid form, other than flavoured/coloured matter	65.6	1.9	68.4	24.1
	Dates, fresh/dried	11.2	3.5	17.8	3.4
	Soya bean oil, refined, & its fractions	2.1	0.6	100.0	-
	Waters (including mineral waters & aerated waters) containing added sugar/other sweetening matter/flavoured, & other non-alcoholic beverages, n.e.s.	1.9	0.0	54.5	15.7
	Pasta, cooked/stuffed; couscous, whether/not prepared	1.6	0.2	85.6	20.0
Azerbaijan	Tomatoes, fresh/chilled	17.7	1.1	0.2	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Hazelnuts/filberts, fresh/dried, whether/not shelled/peeled	17.5	4.9	1.2	13.6
	Fresh fruit other than headings 057.91- 057.97	15.2	1.2	0.3	-
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	11.8	0.4	94.9	12.5
	Apricots, cherries, peaches (including nectarines), plums & sloes, fresh.	5.5	0.5	0.5	-
Bahrain	Food preparations other than headings 098.91 - 098.94	28.0	0.3	95.7	0.4
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	14.7	0.5	99.9	0.1
	Processed cheese, not grated/powdered	10.9	1.9	98.8	0.0
	Other cheese	6.7	0.2	96.3	0.0
	Cigarettes containing tobacco	5.4	0.1	98.9	-
Bangladesh	Shrimps & prawns, frozen	43.1	2.8	0.4	4.3
	Jute & other textile bast fibres, raw/retted	14.9	77.2	20.3	3.0
	Tobacco, wholly/partly stemmed/stripped	6.9	0.9	11.3	67.5
	Crustaceans, other than frozen, including flours, meals & pellets of	6.0	1.4	1.1	2.1

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	crustaceans, fit for human consumption				
	Other vegetables, fresh/chilled	2.2	0.2	70.8	0.3
Brunei Darussalam	Beans, other than broad beans & horse beans, dried, shelled, whether/not skinned/split	14.4	0.0	91.3	2.0
	Food preparations other than headings 098.91 - 098.94	9.6	0.0	4.5	-
	Pasta, cooked/stuffed; couscous, whether/not prepared	1.5	0.0	10.3	-
	Pineapple juice	0.8	0.0	100.0	15.0
	Maize (corn) oil, crude	0.7	0.0	100.0	-
Cameroon	Cocoa beans, whole/broken, raw/roasted	29.4	5.2	14.4	0.3
	Wood of non-coniferous species specified in heading 247.5, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm	23.9	4.1	12.0	3.5
	Bananas (including plantains), fresh/dried	17.4	2.5	0.1	21.5
	Woods in the rough/roughly squared, n.e.s.	5.6	1.8	1.6	0.4
	Cotton (other than linters), not carded/combed	5.5	0.9	19.5	0.1

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
Chad	Cotton (other than linters), not carded/combed	55.5	0.3	17.2	2.8
	Sesame (Sesamum) seeds	42.7	1.0	99.1	12.4
	Groundnuts (peanuts), not roasted/othw. cooked, shelled	0.7	0.0	100.0	7.5
	Whole bovine (incl. buffalo)/equine hides & skins, of a weight per skin not >8kg (simply dried)/10kg (dry-salted)/16kg (fresh/wet-salted/othwise preserved)	0.3	0.0	100.0	5.0
	Other hides & skins, including butts, bends & bellies	0.1	0.0	100.0	5.0
Comoros	Cloves (whole fruit, cloves & stems)	72.9	8.8	22.2	5.2
	Vanilla	16.4	1.1	0.0	5.0
	Wood charcoal (including shell/nut charcoal), whether/not agglomerated	9.1	0.5	100.0	-
	Tunas, skipjack & Atlantic bonito (Sarda spp.), whole/in pieces, but not minced, prepared/preserved	0.1	0.0	100.0	5.0
	Spices (excl. pepper/pimento/headings075.21 - 075.28); mixtures of two/more of the products of different headings of group 075	0.0	0.0	100.0	20.0
Benin	Cotton (other than linters), not carded/combed	39.2	1.9	63.9	0.1

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Cashew nuts, fresh/dried, whether/not shelled/peeled	25.6	2.2	3.6	4.5
	Palm oil, refined, & its fractions	2.3	0.1	99.9	-
	Wood of non-coniferous species specified in heading 247.5, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm	2.2	0.1	0.1	-
	Cotton seeds	1.7	3.1	25.2	-
Djibouti	Wood charcoal (including shell/nut charcoal), whether/not agglomerated	42.9	1.5	100.0	-
	Coffee, not roasted, not decaffeinated	32.1	0.1	0.1	-
	Beans, other than broad beans & horse beans, dried, shelled, whether/not skinned/split	2.8	0.0	22.6	2.5
	Bovine animals, live, other than pure-bred breeding stock	1.9	0.0	100.0	-
	Hides & skins, n.e.s., raw (fresh,/salted, dried, limed, pickled/othw. preserved, but not tanned, parchment-dressed/further prepared), whether/not dehaired/split	0.9	0.1	100.0	3.0
Gabon	Wood of non-coniferous species specified in heading 247.5,	85.4	2.5	4.0	4.2

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm				
	Woods in the rough/roughly squared, n.e.s.	0.8	0.0	27.3	4.8
	Wood of non-coniferous species (including strips & friezes for parquet flooring, not assembled), continuously shaped (tongued, grooved, rebated, chamfered, V-jointed, beaded, moulded, rounded/the like) along any of its edges, ends/faces, whether o	0.8	0.1	0.7	5.0
	Wood of coniferous species, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm	0.8	0.0	84.8	5.0
	Bran, sharps & other residues, of wheat	0.7	0.2	100.0	2.5
Gambia	Woods in the rough/roughly squared, n.e.s.	40.0	1.4	0.0	3.0
	Milk & cream, not concentrated/sweetened, of a fat content, by weight, exceeding 1% but not > 6%	3.8	0.2	100.0	20.0
	Linseed oil, refined, & its fractions	2.9	3.3	100.0	20.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Other sauces & preparations therefor; mixed condiments & mixed seasonings	2.8	0.1	100.0	20.0
	Green tea (not fermented), in immediate packings of a content not > 3 kg, whether/not flavoured	2.1	0.5	100.0	10.0
Palestine	Virgin olive oil	12.0	0.5	66.5	-
	Dates, fresh/dried	5.4	1.1	57.1	10.4
	Other vegetables, fresh/chilled	5.3	0.1	0.3	-
	Food preparations other than headings 098.91 - 098.94	4.1	0.0	0.8	1.5
	Other food preparations containing cocoa, in blocks, slabs/bars, whether/not filled	2.2	0.1	0.4	-
Guinea	Other fish, frozen (excluding livers & roes)	18.8	0.5	12.2	8.9
	Cocoa beans, whole/broken, raw/roasted	17.5	0.4	7.6	-
	Cashew nuts, fresh/dried, whether/not shelled/peeled	14.3	0.5	0.1	30.0
	Coffee, not roasted, not decaffeinated	9.0	0.1	84.8	1.2
	Technically specified natural rubber (TSNR)	6.5	0.2	0.3	-
Guyana	Rice, husked but not further prepared (cargo rice/brown rice)	18.2	5.7	0.0	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Cane sugar, raw, in solid form, not containing added flavouring/colouring matter	13.8	0.5	4.1	-
	Rum & tafia	6.9	2.6	0.4	0.8
	Fruits/edible parts of plants, prepared/preserved, n.e.s.	0.7	0.1	4.7	29.8
	Live animals, n.e.s.	0.3	0.2	9.7	3.6
Indonesia	Palm oil, refined, & its fractions	29.4	52.1	32.3	8.1
	Technically specified natural rubber (TSNR)	9.3	39.6	3.6	0.3
	Palm oil, crude	9.1	41.2	10.9	1.9
	Palm kernel/babassu oil, refined, & fractions thereof	4.2	68.1	9.9	3.8
	Shrimps & prawns, frozen	3.7	8.2	0.9	2.8
Iran	Pistachios, fresh/dried, whether/not shelled/peeled	38.8	26.2	15.6	7.8
	Grapes, dried (e.g., raisins)	6.6	7.5	40.0	11.3
	Dates, fresh/dried	6.0	8.9	38.5	7.2
	Saffron	5.6	44.0	15.2	5.1
	Cucumbers & gherkins, fresh/chilled	3.4	2.7	4.5	11.5
Iraq	Dates, fresh/dried	83.7	9.0	50.8	1.4
	Other hides & skins, including butts, bends & bellies	3.7	0.1	82.5	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Whole bovine (incl. buffalo)/equine hides & skins, of a weight per skin not >8kg (simply dried)/10kg (dry-salted)/16kg (fresh/wet-salted/othwise preserved)	3.3	0.9	0.1	-
	Jams, fruit jellies, marmalades, fruit/nut purTe & fruit/nut pastes, being cooked preparations, whether/not containing added sugar/other sweetening matter, not including homogenized preparations	1.5	0.1	99.9	0.1
	Sheepskins & lambskins without wool on, raw (fresh,/salted, dried, limed, pickled/othw. preserved, but not tanned, parchment-dressed/further prepared), whether/not split	1.1	0.9	18.4	-
Côte d'Ivoire	Cocoa beans, whole/broken, raw/roasted	46.1	36.8	7.9	0.3
	Cocoa paste, not defatted (liquor)	10.4	27.8	6.4	6.2
	Cocoa butter, fat/oil	6.6	10.0	3.9	4.4
	Technically specified natural rubber (TSNR)	6.4	6.1	17.9	0.0
	Cashew nuts, fresh/dried, whether/not shelled/peeled	4.5	6.2	0.1	7.0
Kazakhstan	Other wheat (including spelt) & meslin, unmilled	26.7	1.9	82.1	6.3

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Flour of wheat/of meslin	22.5	11.0	98.6	3.4
	Barley, unmilled	4.9	1.9	90.2	4.4
	Linseed	4.8	12.8	26.7	2.6
	Cigarettes containing tobacco	4.4	0.4	53.2	1.5
Jordan	Tomatoes, fresh/chilled	18.4	2.3	98.2	0.2
	Sheep, live	10.8	11.0	92.7	-
	Other vegetables, fresh/chilled	5.5	0.5	74.4	-
	Apricots, cherries, peaches (including nectarines), plums & sloes, fresh.	5.4	0.9	98.3	-
	Smoking tobacco, whether/not containing tobacco substitutes in any proportion.	4.7	1.2	66.0	1.1
Kuwait	Cream, not concentrated/sweetened, of a fat content, by weight, exceeding 6%	12.7	2.7	100.0	0.1
	Flour of wheat/of meslin	9.4	1.1	100.0	-
	Waters (including mineral waters & aerated waters) containing added sugar/other sweetening matter/flavoured, & other non-alcoholic beverages, n.e.s.	6.5	0.2	99.7	0.0
	Ice-cream & other edible ice, whether/not containing cocoa	5.6	0.9	100.0	-
	Mixtures of fruit/vegetable juices	4.7	1.4	100.0	0.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
Kyrgyzstan	Beans, other than broad beans & horse beans, dried, shelled, whether/not skinned/split	33.6	1.6	56.3	9.3
	Cotton (other than linters), not carded/combed	11.0	0.2	60.1	-
	Fruit, dried, n.e.s., & mixtures, n.e.s., of nuts/dried fruits of group 057	8.1	0.6	49.8	1.3
	Cigarettes containing tobacco	7.0	0.1	21.2	29.0
	Butter & other fats & oils derived from milk	4.2	0.1	5.2	-
Lebanon	Other beet/cane sugar in solid form, other than flavoured/coloured matter	7.0	0.4	99.5	10.6
	Apples, fresh	6.0	0.7	93.2	-
	Nuts, groundnuts & other seeds, prepared/preserved, n.e.s.	5.6	0.8	49.1	4.7
	Potatoes, fresh/chilled (not including sweet potatoes)	4.9	1.0	99.7	0.0
	Food preparations other than headings 098.91 - 098.94	4.8	0.1	84.6	1.9
Libya	Fish, live	19.2	0.4	14.4	-
	Other hides & skins, including butts, bends & bellies	6.9	0.1	94.1	-
	Sheepskins & lambskins without wool on, raw (fresh,/salted, dried, limed, pickled/othw. preserved, but	6.4	1.6	12.9	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	not tanned, parchment-dressed/further prepared), whether/not split				
	Potatoes, fresh/chilled (not including sweet potatoes)	5.2	0.1	100.0	-
	Ice-cream & other edible ice, whether/not containing cocoa	4.1	0.0	100.0	-
Malaysia	Palm oil, refined, & its fractions	28.9	33.9	34.0	13.3
	Palm oil, crude	11.3	34.0	6.1	8.8
	Technically specified natural rubber (TSNR)	3.6	10.2	10.1	2.8
	Wood of non-coniferous species specified in heading 247.5, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm	3.6	8.5	16.9	6.1
	Vegetable fats & oils & their fractions, partly/wholly hydrogenate	3.0	22.3	35.9	13.1
Maldives	Fish fillets & other fish meat, fresh/chilled	26.2	0.8	0.3	5.0
	Tunas, skipjack/stripe-bellied bonito, fresh/chilled (excluding livers & roes)	25.7	4.8	1.9	-
	Tunas, skipjack/stripe-bellied bonito, frozen (excluding livers & roes)	23.7	1.1	0.3	5.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Tunas, skipjack & Atlantic bonito (Sarda spp.), whole/in pieces, but not minced, prepared/preserved	9.1	0.3	0.0	5.0
	Other fish, fresh/chilled (excluding livers & roes)	2.6	0.1	0.7	-
Mali	Cotton (other than linters), not carded/combed	26.3	1.3	25.0	0.1
	Sheep, live	21.7	10.8	99.1	-
	Pure-bred bovine breeding animals, live	17.8	8.5	99.8	-
	Sesame (Sesamum) seeds	13.9	3.0	0.3	5.6
	Avocados, guavas, mangoes & mangosteens, fresh/dried	3.5	0.3	33.1	0.9
Mauritania	Cuttlefish, octopus & squid, frozen, dried, salted/in brine; flours, meals & pellets thereof, fit for human consumption	29.5	4.7	0.1	26.3
	Salmonidae, frozen (excluding livers & roes)	14.3	4.3	48.5	10.1
	Flours, meals & pellets, of fish/of crustaceans, molluscs/other aquatic invertebrates, unfit for human consumption	11.8	2.7	15.8	3.8
	Other fish, frozen (excluding livers & roes)	10.5	1.2	39.8	10.0
	Other fish, fresh/chilled (excluding livers & roes)	7.6	1.8	13.4	10.3

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
Morocco	Tomatoes, fresh/chilled	13.5	8.9	2.1	2.8
	Cuttlefish, octopus & squid, frozen, dried, salted/in brine; flours, meals & pellets thereof, fit for human consumption	13.2	12.7	0.2	0.8
	Mandarins (including tangerines & satsumas); clementines, wilkings & similar citrus hybrids, fresh/dried	8.1	10.4	4.3	8.2
	Herrings, sardines, sardinella & brislings/sprats, whole/in pieces, but not minced, prepared/preserved	7.0	25.7	35.6	18.1
	Other vegetables, fresh/chilled	4.8	2.5	2.5	5.2
Mozambique	Tobacco, wholly/partly stemmed/stripped	23.5	3.1	19.9	27.7
	Other dried leguminous vegetables	8.6	9.9	2.7	5.0
	Cashew nuts, fresh/dried, whether/not shelled/peeled	6.1	1.1	6.6	5.8
	Sesame (Sesamum) seeds	4.3	2.0	2.8	9.3
	Shrimps & prawns, frozen	3.7	0.3	0.2	-
Oman	Milk & cream, concentrated/sweetened, in solid form, of a fat content, by weight, exceeding 1.5%	11.6	2.0	97.3	1.7
	Cigarettes containing tobacco	7.3	0.5	100.0	-
	Bread & bread products, n.e.s.	6.8	0.6	97.9	0.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Palm oil, refined, & its fractions	5.4	0.4	99.5	-
	Other fish, frozen (excluding livers & roes)	5.1	1.0	5.0	2.6
Niger	Palm oil, refined, & its fractions	27.8	0.6	89.3	1.3
	Sesame (Sesamum) seeds	25.2	4.9	0.0	-
	Rice, husked but not further prepared (cargo rice/brown rice)	24.7	7.1	1.9	5.0
	Pasta, cooked/stuffed; couscous, whether/not prepared	5.8	0.7	82.6	18.6
	Rice, semi-milled/wholly milled, whether/not polished, glazed, parboiled/converted (excluding broken rice)	3.8	0.1	0.1	6.0
Nigeria	Cocoa beans, whole/broken, raw/roasted	40.3	7.3	7.0	0.2
	Sesame (Sesamum) seeds	12.9	9.9	55.0	11.8
	Woods in the rough/roughly squared, n.e.s.	10.1	3.3	0.0	5.0
	Cigarettes containing tobacco	6.1	0.5	88.7	4.7
	Shrimps & prawns, frozen	5.5	0.6	0.1	-
Pakistan	Rice, semi-milled/wholly milled, whether/not polished, glazed, parboiled/converted (excluding broken rice)	30.1	8.4	50.7	6.9
	Broken rice	8.0	16.2	66.8	11.3

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Mandarins (including tangerines & satsumas); clementines, wilkings & similar citrus hybrids, fresh/dried	4.7	4.7	55.5	9.0
	Flour of wheat/of meslin	3.9	3.8	99.7	5.0
	Meat of bovine animals, fresh/chilled, with bone in	3.6	2.6	100.0	-
Guinea-Bissau	Cashew nuts, fresh/dried, whether/not shelled/peeled	80.5	3.4	0.7	26.1
	Other fish, frozen (excluding livers & roes)	2.0	0.1	10.5	-
	Salmonidae, frozen (excluding livers & roes)	1.4	0.1	100.0	-
	Sesame (Sesamum) seeds	1.0	0.1	56.2	12.5
	Coffee, not roasted, not decaffeinated	0.0	0.0	98.0	-
Qatar	Flour of wheat/of meslin	20.3	0.2	99.7	-
	Waters, including natural/artificial mineral waters & aerated waters, not containing added sugar/other sweetening matter nor flavoured; ice & snow.	18.0	0.2	100.0	-
	Live animals, n.e.s.	17.1	0.7	99.8	-
	Ice-cream & other edible ice, whether/not containing cocoa	10.9	0.1	99.7	-
	Sheepskins & lambskins (except Astrakhan, Broadtail, Caracul,	7.7	0.7	78.6	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Persian/similar lambs, Indian, Chinese, Mongolian/Tibetan lambs) with the wool on, raw (fresh/salted, dried, limed, pickled/othw. preserved, but not tanned, parchment-dressed				
Saudi Arabia	Yogurt, whether/not concentrated/containing added sugar/other sweetening matter/flavoured/containing added fruit, nuts/cocoa	7.7	10.7	100.0	-
	Mixtures of fruit/vegetable juices	7.3	13.8	99.4	0.1
	Bread & bread products, n.e.s.	6.8	1.3	99.0	0.0
	Waters (including mineral waters & aerated waters) containing added sugar/other sweetening matter/flavoured, & other non-alcoholic beverages, n.e.s.	6.2	1.1	97.9	0.4
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	5.3	1.3	80.3	7.0
Senegal	Other fish, frozen (excluding livers & roes)	14.6	2.0	53.4	4.1
	Soups & broths & preparations therefor	8.8	4.0	93.0	3.1
	Cigarettes containing tobacco	5.3	0.3	84.6	8.7
	Tunas, skipjack/stripe-bellied bonito, frozen (excluding livers & roes)	5.1	1.4	29.1	4.3

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Groundnuts (peanuts), not roasted/othw. cooked, shelled	5.1	2.6	4.2	19.2
Sierra Leone	Other fish, frozen (excluding livers & roes)	4.3	0.2	0.4	-
	Coffee, not roasted, not decaffeinated	1.1	0.0	6.5	-
	Bovine animals, live, other than pure-bred breeding stock	0.2	0.0	100.0	-
	Palm oil, refined, & its fractions	0.1	0.0	3.2	20.0
	Waters (including mineral waters & aerated waters) containing added sugar/other sweetening matter/flavoured, & other non-alcoholic beverages, n.e.s.	0.1	0.0	46.4	5.0
Somalia	Goats, live	28.5	30.9	100.0	-
	Bovine animals, live, other than pure-bred breeding stock	19.6	0.7	100.0	-
	Sheep, live	18.5	3.9	100.0	-
	Sesame (Sesamum) seeds	11.3	1.1	16.3	6.2
	Other molluscs & aquatic invertebrates, frozen, dried, salted/in brine, including flours, meals & pellets of aquatic invertebrates other than crustaceans, fit for human consumption	3.2	0.2	0.0	5.0
Sudan	Sesame (Sesamum) seeds	39.6	11.6	46.3	3.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Other dried leguminous vegetables	9.2	6.6	6.9	-
	Lucerne (alfalfa) meal & pellets	6.1	14.5	100.0	-
	Cotton (other than linters), not carded/combed	5.7	0.4	48.6	-
	Swedes, mangolds, fodder roots, hay, clover, sainfoin, forage kale, lupines, vetches & similar forage products, whether/not in the form of pellets	3.8	1.3	100.0	-
Suriname	Woods in the rough/roughly squared, n.e.s.	18.0	1.0	2.2	-
	Other fish, frozen (excluding livers & roes)	7.3	0.3	0.3	1.0
	Wood of non-coniferous species specified in heading 247.5, sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness exceeding 6 mm	7.0	0.2	1.6	2.2
	Broken rice	3.7	0.5	1.1	-
	Other fish, fresh/chilled (excluding livers & roes)	3.6	0.3	0.7	-
Syria	Seeds of anise, badian, fennel, coriander, cumin/caraway; juniper berries	17.3	10.0	69.1	6.5
	Virgin olive oil	13.1	1.0	67.2	0.4
	Apples, fresh	6.9	0.5	99.9	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Pistachios, fresh/dried, whether/not shelled/peeled	6.3	1.1	96.8	-
	Cotton (other than linters), not carded/combed	5.3	0.2	99.4	-
Tajikistan	Cotton (other than linters), not carded/combed	56.2	0.6	64.2	1.3
	Fish fillets, frozen	12.9	0.1	100.0	30.0
	Fruit, dried, n.e.s., & mixtures, n.e.s., of nuts/dried fruits of group 057	9.5	0.5	83.7	0.3
	Onions & shallots, fresh/chilled	8.1	0.3	99.7	-
	Rice, semi-milled/wholly milled, whether/not polished, glazed, parboiled/converted (excluding broken rice)	2.5	0.0	98.5	5.0
Togo	Sesame (Sesamum) seeds	23.4	3.7	2.5	12.4
	Cotton (other than linters), not carded/combed	16.4	0.6	71.6	1.4
	Cocoa beans, whole/broken, raw/roasted	8.6	0.3	2.9	-
	Waters (including mineral waters & aerated waters) containing added sugar/other sweetening matter/flavoured, & other non-alcoholic beverages, n.e.s.	5.5	0.1	98.5	-
	Other fixed vegetable fats, crude, refined/fractionated, other than ôsoftö	5.4	1.1	5.5	5.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
UAE	Cigarettes containing tobacco	8.7	3.6	91.1	1.4
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	7.3	4.8	71.4	12.0
	Rice, semi-milled/wholly milled, whether/not polished, glazed, parboiled/converted (excluding broken rice)	5.7	3.3	95.9	37.9
	Milk & cream, concentrated/sweetened, in solid form, of a fat content, by weight, exceeding 1.5%	5.1	5.2	96.9	1.5
	Food preparations other than headings 098.91 - 098.94	4.8	1.2	95.8	13.7
Tunisia	Virgin olive oil	28.5	6.8	4.5	7.7
	Dates, fresh/dried	16.3	19.2	38.8	2.5
	Shrimps & prawns, frozen	4.3	0.4	0.1	2.1
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	3.2	0.3	82.4	2.2
	Other olive oil & its fractions	2.7	3.0	19.6	6.8
Turkey	Flour of wheat/of meslin	6.2	23.2	84.7	11.1
	Hazelnuts/filberts, fresh/dried, whether/not shelled/peeled	5.9	53.1	4.4	7.0
	Nuts, groundnuts & other seeds, prepared/preserved, n.e.s.	4.6	12.9	5.9	14.0

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Cigarettes containing tobacco	4.6	3.5	66.2	65.2
	Sunflower seed/safflower oil, refined, & fractions thereof	3.7	19.7	93.6	4.9
Turkmenistan	Cotton (other than linters), not carded/combed	84.9	2.1	85.2	0.4
	Cotton linters	7.2	12.8	0.2	-
	Other hides & skins, including butts, bends & bellies	2.6	0.2	99.1	-
	Cotton waste (including pulled/garnetted rags), not carded/combed	1.7	1.2	78.1	-
	Other wool, degreased, not carbonized, not carded/combed	0.9	0.3	0.9	-
Uganda	Coffee, not roasted, not decaffeinated	28.4	2.0	18.3	5.7
	Cocoa beans, whole/broken, raw/roasted	5.4	0.7	42.0	0.1
	Other black tea (fermented) & other partly fermented tea, whether/not flavoured	4.5	1.9	10.1	7.8
	Other beet/cane sugar in solid form, other than flavoured/coloured matter	4.1	0.4	0.0	2.0
	Fish fillets & other fish meat, fresh/chilled	4.0	1.0	13.1	9.4
Egypt	Oranges, fresh/dried	11.2	12.3	40.1	3.5

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Onions & shallots, fresh/chilled	4.5	7.4	63.9	3.2
	Grapes, fresh	4.3	2.7	15.3	1.0
	Food preparations other than headings 098.91 - 098.94	4.1	0.6	93.7	2.7
	Potatoes, fresh/chilled (not including sweet potatoes)	3.6	4.8	31.0	37.1
Burkina Faso	Cotton (other than linters), not carded/combed	61.9	4.8	22.6	0.7
	Cashew nuts, fresh/dried, whether/not shelled/peeled	18.0	2.4	7.7	0.4
	Sesame (Sesamum) seeds	4.2	1.4	23.0	1.4
	Oil-seeds & oleaginous fruits, n.e.s.	3.3	1.8	2.3	0.0
	Avocados, guavas, mangoes & mangosteens, fresh/dried	2.9	0.3	4.5	0.3
Uzbekistan	Cotton (other than linters), not carded/combed	24.1	1.8	10.5	0.2
	Apricots, cherries, peaches (including nectarines), plums & sloes, fresh.	15.2	1.9	73.9	0.0
	Grapes, dried (e.g., raisins)	9.7	4.7	40.6	1.1
	Grapes, fresh	8.6	0.8	75.2	-
	Fresh fruit other than headings 057.91- 057.97	4.9	0.6	80.7	-
Yemen	Other fish, fresh/chilled (excluding livers & roes)	12.1	0.4	99.3	-

	Thresholds for coloring	10.0	Country's share in the world agricultural exports, %	Share of OIC as destination for the country's agr. exports, %	Weighted avg. tariff rates implemented by OIC members to the country's agr. exports, %
	Other fish, frozen (excluding livers & roes)	11.0	0.2	25.1	-
	Other molluscs & aquatic invertebrates, frozen, dried, salted/in brine, including flours, meals & pellets of aquatic invertebrates other than crustaceans, fit for human consumption	7.5	0.3	0.9	-
	Cuttlefish, octopus & squid, frozen, dried, salted/in brine; flours, meals & pellets thereof, fit for human consumption	7.2	0.2	95.6	-
	Fresh fruit other than headings 057.91- 057.97	6.3	0.1	98.0	-

Source: ITC Macmap, CEPII BACI, Eurostat RAMON, UN Comtrade, UN Trade Statistics, and authors' calculations

Table F. 13 Coverage Ratios for SPS measures (in force), %

	Animals	Vegetables	Food Prod.	Hides & skins	Wood
Algeria	92.76	100.00	76.75		
Bahrain	100.00	100.00	99.93		7.80
Kuwait	92.38	99.99	96.63		
Lebanon	99.85	99.90	79.75		19.80
Mauritania	100.00	99.95	91.94	0.17	20.22
Morocco	100.00	100.00	65.91	100.00	36.14
Oman	99.98	99.98	80.48		
Palestine	100.00	100.00	80.17		
Qatar	99.92	100.00	90.10		
Saudi Arabia	100.00	99.96	84.88	43.96	4.90
Tunisia	100.00	85.10	79.74		
UAE	100.00	99.98	98.31	52.37	42.50
Afghanistan	42.07	21.60	2.70		
Brunei Darussalam	96.55	99.99	99.98		11.35
Indonesia	100.00	98.44	76.39	77.82	12.80
Malaysia	99.63	78.09	69.51	22.52	0.48
Pakistan	100.00	32.42	3.29	65.53	9.63
Tajikistan	100.00	99.98	98.36	8.40	46.13
Turkey	92.44	95.36	51.29	24.54	27.17
Guyana	99.20	99.20	82.58		
Suriname	63.22	54.14	12.01	34.68	
Benin	100.00	100.00	100.00	0.84	
Burkina Faso	100.00	100.00	76.31	0.29	14.24
Cameroon	99.85	90.25	18.10	0.05	
Cote d'Ivoire	18.54	74.61	18.28		
Gambia	99.69	83.14	90.68		
Niger	99.55	100.00	74.32		48.22
Nigeria	99.48	37.15	87.40		
Senegal	100.00	99.94	10.53	7.82	1.65
European Union	**99.91**	**99.13**	**91.77**	**46.67**	**39.12**
ASEAN	**94.73**	**84.22**	**80.35**	**35.36**	**19.95**
MERCOSUR	**99.82**	**95.84**	**95.43**	**59.98**	**33.41**
ECOWAS	**98.76**	**99.63**	**94.27**		**8.25**

Source: WITS and authors' calculations

Table F.14 Coverage ratios for TBT measures (in force), %

	Animals	Vegetables	Food Prod.	Hides & skins	Wood
Algeria	92.73	98.85	76.75		0.23
Bahrain	0.02	10.68	21.38	0.01	10.55
Kuwait	87.99	96.06	95.14	1.67	0.12
Lebanon	64.03	11.75	63.45	5.29	0.45
Mauritania	20.77	0.68	4.36		
Morocco	97.69	97.32	67.89	13.24	5.17
Oman	11.14	78.19	37.70		12.33
Palestine	46.74	28.55	86.54	50.52	71.99
Qatar	99.95	100.00	100.00	100.00	31.44
Saudi Arabia	31.66	11.12	0.76	44.92	40.81
Tunisia	61.78	83.46	58.24	72.16	29.34
UAE	0.08	15.11	4.39	0.00	8.77
Afghanistan		20.87	1.52		
Brunei Darussalam	88.74	96.40	76.63	16.53	
Indonesia	96.76	48.53	49.14	6.33	12.56
Malaysia	100.00	99.58	99.10	39.48	26.92
Pakistan		21.45			
Tajikistan			81.26	0.01	79.48
Turkey	14.75	0.01	48.37	72.21	37.55
Guyana	99.02	99.94	100.00	100.00	99.44
Suriname		69.24	11.05		0.51
Benin	35.06	95.10	69.27		32.34
Burkina Faso	22.30	46.08	4.42		
Cameroon			22.84	0.05	3.95
Cote d'Ivoire			6.54		
Gambia	99.65	83.14	25.82	0.05	
Niger		1.04	24.20		0.01
Nigeria	59.64	0.49	34.88	30.34	0.54
Senegal	17.05		2.67		
European Union	**99.29**	**99.86**	**99.77**	**99.83**	**84.54**
ASEAN	**91.63**	**84.35**	**85.98**	**25.84**	**28.58**
MERCOSUR	**91.83**	**93.46**	**89.82**	**45.49**	**17.46**
ECOWAS	**97.70**	**94.39**	**75.94**	**23.57**	**7.52**

Source: WITS and authors' calculations

Table F. 15 Coverage ratios for pre-shipment inspection & other formalities (in force), %

	Animals	Vegetables	Food Prod.	Hides & skins	Wood
Bahrain	100.00	98.66	78.58	53.08	18.22
Kuwait	22.36	0.03	3.21		
Lebanon	74.72	3.21	8.82	5.29	9.20
Mauritania	0.22				
Morocco		82.72	11.07		36.14
Oman	42.79	0.11	5.05		
Qatar	37.24	0.31	5.31		
Saudi Arabia	100.00	7.19	12.95	43.95	5.50
Tunisia	100.00	83.68	21.50	8.61	20.35
UAE	100.00	98.65	24.75	52.33	4.54
Afghanistan		21.59	2.58		
Brunei Darussalam	61.29				
Indonesia	72.32	72.94	42.20		11.90
Malaysia	4.91	16.88			0.48
Pakistan	100.00	26.62	3.66		
Turkey	89.01	89.44	31.87	62.39	29.17
Guyana	1.77	0.12	1.92		
Benin	90.42	97.12	69.43		3.36
Burkina Faso		49.53	69.96		14.24
Cote d'Ivoire	99.22	82.41	44.93		
Niger		99.87	34.71		48.22
Nigeria	0.52	62.85	54.58	100.00	100.00
Senegal		16.78	15.58		0.05
European Union	**6.35**		**4.87**		**0.38**
ASEAN	**42.96**	**54.78**	**40.03**	**0.00**	**14.19**
MERCOSUR	**20.12**	**34.48**	**6.38**		
ECOWAS	**14.76**	**0.03**	**16.92**		

Source: WITS and authors' calculations